DOCUMENT RESUME

ED 168 242 EC 113 867

AUTHOR	Bricker, Diane; Wahlin, Linda
TITLE	Personnel Preparation for Teachers of the Young Severely/Profoundly Handicapped Child.
INSTITUTION	Mailman Center for Child Development, Miami, Fla.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C. Div. of Personnel Preparation.
PUB DATE	77
NOTE	109p.; Some print is marginal and may not reproduce well in hard copy
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Course Descriptions; Higher Education; Inservice Teacher Education; *Material Development; *Program Development; *Severely Handicapped; *Teacher Education; Teaching Skills

ABSTRACT

The document reports on a training program to equip a variety of educational personnel to deal effectively with a population of severely/profoundly handicapped young children. Section I describes the program in terms of the problem, the need, and goals and objectives (which include the development of training materials which enhance the effectiveness of personnel preparation programs for the severely/profoundly handicapped). Section II, which makes up the bulk of the document, relates the rationale, methodology, and procedures for carrying out the three program components: preservice training leading to a Master's or Specialist in Education degree; inservice training for personnel working in community settings, and development of training materials. Proposals for evaluation of the program are outlined. (SBH)

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University of Miami

Mailman Center for Child Development

Debbie Institute

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1977

Personnel Preparation for Teachers of the Young Severely/Profoundly Handicapped Child[1]

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[1]Supported by Personnel Preparation Division, Bureau for the Education of the Handicapped, USOE.

Acknowledgements

The development of a graduate training program is a major undertaking and the individuals associated with the program described in this monograph have often been painfully stretched to provide the necessary resources and solve the multitude of problems that we have encountered. Such demands have been admirably met by the faculty and staff of the Debbie Institute. In particular we should like to acknowledge the substantial concern and contribution from Laura Dennison, Dick Iacino, Valerie Casuso, Jeff Seibert, Anne Hogan, and Jacque Davis. Without their superb assistance, the quality of this training program would have been greatly diminished.

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Abstract

The advent of federal and state legislation requiring the provision of educational services to severely/profoundly handicapped populations previously excluded from public schools has produced an immediate and overwhelming need for new curricular materials, instructional procedures and appropriately trained direct service personnel and supervisors. This Personnel Preparation Program focuses specifically on the need for trained personnel through the establishment of the following three goals:

1. To provide a preservice program of studies leading to either a Master's degree in Special Education for those students interested in providing direct intervention services to severely profoundly handicapped children, or a Specialist in Education degree for post-masters students who desire special supervisory training and experience with severely/profoundly handicapped children;
2. To provide in-service training for personnel already working with severely/profoundly handicapped children in community settings; and
3. To develop training materials which enhance the effectiveness of personnel preparation programs for the severely/profoundly handicapped.

These goals are being met for each of the target groups by using a carefully sequenced, structured program of competency-based experiences and interrelated didactic information.

PROJECT DESCRIPTION

I. Problem, Needs, Goals and Objectives

Introduction

This Project, which has evolved from a B.E.H. Special Project's Personnel Preparation Program, is directed at a pressing and immediate need for a variety of educational personnel who are specially trained to work with severely/profoundly handicapped children from birth through early school-age. While this need has been evident for some time (Martin, 1971), the utility of educational programming for severely and profoundly handicapped children has been demonstrated only in the last few years (Haring & Brown, 1976). This demonstration, in conjunction with recent legislative and judicial actions, has produced a sudden and rapidly growing mandate for school systems to provide public education for all children, regardless of degree or type of handicapping condition (Bricker, Iacino, and Stempfel, 1975; Sontag, Smith & Certo, 1977). Unfortunately, few educators or other professionals have either the training or the experience with significantly impaired children to develop, implement, and evaluate adequate programs of instruction. The movement toward unrestricted public education for the severely handicapped child opens a new professional area in which certification requirements, necessary teaching skills, and curriculum content will have to be developed to serve a target population of children defined by the Bureau for the Education of the Handicapped, U.S.O.E. (1974) as:

> those who, because of the intensity of their physical, mental, or emotional problems or a combination of such problems, need educational, social, psychological, and medical services beyond those which are

traditionally offered by regular and special education programs, in order to maximize their full potential for useful and meaningful participation in society and for self-fullfilment. (Section 121,2)

Fortunately, the solution to the educational problems posed by these children is not impossible, given the opportunity for early intervention and parent involvement using carefully prescribed systems of instruction. The experiences of the project director and her colleagues during the past several years (D. Bricker and W. Bricker, 1971; 1972; 1973; D. Bricker, W. Bricker, Iacino, and Dennison, 1976; Bricker, Seibert, and Casuso, in press) have indicated that instruction for severely and profoundly handicapped children can be extended beyond the usual expectations of behavior management and training in self-help skills into the areas of cognitive and linguistic development for the ultimate benefit of the children, their parents, and their community.

The Problem

Combined legislative and legal mandates, resulting from the recognition by many persons of the historical denial of rights to the significantly handicapped individual, have led to a literal "explosion" of new and expanded educational programs for this population. As we are aware, by 1978 all school-age handicapped children must be provided a free, public education appropriate to their needs. In many states public schools will also have to provide appropriate educational services for three, four and five year old handicapped children. The challenge has clearly become one of developing and assembling the necessary resources to assure that appropriate educational services will be available for the severely/profoundly handicapped child.

The Need

As reported in the February 20, 1975 edition of the Federal Register, the U.S. Office of Education, Department of Health, Education and Welfare, Programs for the Education of the Handicapped has established as an objective:

> To encourage additional educational programming for severely handicapped children to enable them to become as independent as possible, thereby reducing their requirements for institutional care, and providing opportunities for self-development. (p. 7412)

This statement taken in conjunction with recent BEH funding patterns suggests that the development of programs for the severely/profoundly handicapped child and the training of personnel to operate these programs is a high priority and a critical need throughout the country (Burke & Cohen, 1977; Harvey, 1976).

The purpose of this training program is the transmission of necessary training skills and knowledge of instructional content as well as the encouragement of attitudes that convey intelligent optimism about the futures of many of the children who are now included in educational programs by virtue of the new legislation. By substituting new concepts for old ones, such as attending to adaptive skill levels rather than etiologies, ameliorating repertoire deficiencies rather than curing severe handicaps, and normalizing the behavior of children rather than making children completely normal, we should be able to build a reasonable set of developmental objectives for each child which should be attainable as a consequence of implementing effective educational programs.

This Personnel Preparation program is aimed at the need to train appropriate educational personnel; complementing this need is an associated concern for developing a model service program which includes disseminable curriculum and materials particularly structured for use by interventionists working with the significantly impaired child and his family.

National Need: The opening remarks of this paper are intended to emphasize the need for professionals trained to implement programs for severely and profoundly handicapped children. Given the effectiveness of advocacy groups, legal mandates and legislative requirements all states are being compelled to provide educational services for the previously unserved severely/profoundly handicapped child. Consequently, the need for appropriately trained teachers of severely impaired children has increased dramatically on a nationwide scale. We should like to emphasize that many states are currently being forced to assign personnel to programs for the severely/profoundly handicapped who have neither appropriate experiential or informational backgrounds to cope with the multitude of problems in this population. The immediate need to provide programs for previously unserved children often forces local school districts to hire personnel that are poorly equipped to manage such a difficult population in an educational setting. Therefore, the national need in this area includes not only the responsibility to provide effective preservice training but, as importantly, to provide in-service assistance to those individuals already in the field operating programs. It is unlikely that the need to staff programs with appropriately trained personnel will be met within the near future. The limited number of training programs available nationwide require that programs, regardless of geographical location, address a national need. This program is attempting to do this by offering a specialization in very young severely/profoundly handicapped children.

Goals and Objectives

Davis (1972) has succinctly stated the problem of training teachers to work with the severely and profoundly handicapped child: "...the educator has failed to make the necessary adjustment because he has not received the proper preparation and is not equipped to deal effectively with the severely and profoundly retarded" (pp.217-218). Until recently the majority of severely handicapped individuals have been placed in institutions, and therefore teachers in public schools have never had to cope with this population. Educational personnel simply have not been taught the skills to handle the variety and severity of problems that accompany the severely impaired population. This training program is geared toward equipping a variety of educational personnel to deal effectively with a population of severely/profoundly handicapped young children. Specifically this training program is divided into three major program components:

1.0 A preservice degree program leading to either a Master's degree in Special Education or a Specialist's degree in Education;

2.0 In-service training for personnel working with the severely/profoundly handicapped;

3.0 Training materials that, in fact, provide the content for the preservice and in-service personnel preparation.

These three program components have been translated into a series of major goals and specific objectives.

Goal 1 - To provide preservice degree programs leading to either a Master's degree in Special Education or a Specialist's degree in Education.

Objective 1: To offer a university approved preservice graduate training program for post bachelor's level trainees who are interested in providing direct services to severely/profoundly handicapped children.

The objectives or behavioral targets for direct services focus primarily on building into the teacher's repertoire a variety of skills or strategies to facilitate and maintain observable progress in severely impaired children in the critical areas of development. A second and equally important aspect of this objective is the training of direct intervention skills for effective intervention with parents. The supervisory personnel of this training program have coordinated a preschool program for a number of years now in which parent training is a fundamental component (Bricker, Seibert, and Casuso, in press) and, consequently, are in a position to implement the objective of training educators to teach parents to be change agents with their own handicapped children.

A well-trained teacher should also be able to provide the relevant content of instruction, which is a third aspect of this objective. Unfortunately, few curriculum materials are available for training low-functioning children. Although some educational materials are purported to be useful for severely handicapped children, these materials are often inappropriate for the child still operating within the early sensorimotor period where the predominate repertoires consist of primitive preverbal sensorimotor acts and even simple reflexive forms of behavior. Therefore, it is necessary to provide students with the skills for developing and implementing appropriate curriculum or programs of instruction in the areas of social, motor, cognitive and language development. Most importantly, the training program focuses on

on the development of a "generative teacher" who can program consistently from a sound comprehensive theoretical basis and who can modify methods and materials in such a way that progress is facilitated.

In order to be effective in the delivery of services the teacher needs to have a broad range of skills for implementing and evaluating the major components of an intervention program. Teachers should be able to select and implement evaluation procedures and use the resulting information effectively in data-based program decision making.

> Objective 2: To offer a university approved preservice graduate training program for postmaster's level trainees who are interested in acquiring supervisory or coordinating skills appropriate for programs focusing on the severely/profoundly handicapped.

For those students who anticipate moving into supervisory roles it is necessary to develop a variety of skills for the effective use of resources, fiscal responsibility and a smoothly functioning comprehensive program. An extremely well-trained classroom staff can cease to function if parents are unhappy, diapers are not available, food services are not forthcoming or transportation of the children is inadequate. Consequently, this objective concerns the development of appropriate and necessary administrative and supervisory skills. Underlying the skills proposed in this objective is the tacit understanding that the trainee has all the skills outlined in objective 1.

Goal 2 - To provide a variety of in-service training programs for personnel working with the severely/profoundly handicapped children.

Objective 1: To provide workshops at the Mailman Center, Debbie Institute for individuals within the state of Florida who are working with the severely/profoundly handicapped child.

Objective 2: To provide on-going in-service training for direct interventionist from local programs focusing on the young handicapped child.

Objective 3: To provide in-service training opportunities to individuals not residing in the state of Florida by:

a) offering throughout the year monthly two-day training visits to the Mailman Center, Debbie Institute for individuals from programs serving handicapped preschool children,

b) offering an annual two-week workshop at the Mailman Center, Debbie Institute for individuals working in the area of the severely/profoundly handicapped.

Objective 4: To provide special practicum training programs for:

a) students enrolled in other UAF training programs (e.g., nurse practitioner program, psychiatric residents, communication specialists),

b) undergraduate students from local universities (University of Miami, Florida International University),

c) students enrolled in specific training programs for classroom aides or child development specialists.

Goal 3 - To develop training materials that provide the content for the preservice and in-service personnel preparation.

Objective 1: To develop and make available a series of practicum based training modules covering critical content areas and instructional skills for personnel working with the severely/profoundly handicapped child.

Objective 2: To develop and make available extensive descriptions of specialized didactic course work for personnel working with the severely/profoundly handicapped child.

As indicated in the major objectives described above, we believe this program is and will continue to make a unique contribution to the training of personnel who will work or are working with severely and profoundly handicapped children in a variety of settings. The objectives encompassed in this training program expand the notion of an educational enterprise from that of a direct teacher-student interaction to a range of administrative and evaluative procedures that must be included in an intervention program if it is to be successful with the target population. We believe that educators must be knowledgeable about political action as well as the details of daily instructional programming for the children. A broad exposure to many necessary facets of programming for severely/profoundly handicapped children will be provided. For example, those trainees who will return to supervisory roles will be reintroduced to daily contacts with children who have been previously excluded from school so they can have a personal experiential basis for making programmatic decisions. At the same time, teachers who are being trained as classroom personnel will come into contact with the decision making processes that determine and modify their respective roles in the

classroom. We believe this exchange of information will help students trained for different roles to relate their respective contributions to a total educational program which we feel is vital if we are to succeed with this population.

All levels of training emphasize practical activities within the context of the Debbie Institute program of the Mailman Center for Child Development, University of Miami, and experimental Dade County programs for severely/profoundly handicapped school-age children. Through the use of these appropriate and varied practicum sites, each aspect of the didactic training is directly related to ongoing instructional activities, including the training of parents, and to the synthesis of a consistent educational program through contacts with a broad range of other relevant disciplines.

Personnel trained in this program not only have access to existing curriculum materials developed by the current staff, but are part of the group that evaluates and expands these materials. Through this participation, trainees learn to modify curriculum materials for different populations and resource levels, as well as learn to develop and validate new materials. It is possible that a curriculum for the lower functioning child will consist more of environmental and social arrangements that are engineered by the teacher on the basis of a set of developmental goals than a set of published lesson plans that are used on a daily basis. Education of profoundly handicapped persons focuses on training routines and developmental probes that are often done on a one-to-one basis rather than developing textbooks, worksheets, and other group oriented materials. Therefore, a "curriculum" for the lower functioning person may actually be a set of flexible principles that are used in a variety of contexts to stimulate the development of the students in im-

portant domains of behavior. Our presumption in this program is that we can, through research, come to isolate and use these principles and then teach them to other personnel who will be eventually working with severely and profoundly handicapped children.

II. Methodology and Procedures

Rationale for the Present Training Approach

The multiple and complex problems associated with educational programming for the severely/profoundly handicapped appear to demand both additional competencies and a different orientation toward skills previously thought necessary to be an effective educational change agent. Thus, while aspects of this training rationale may be desirable for preparing any interventionist, many of the skills discussed here may not be critical training foci for teachers dealing with less severely involved children. Admittedly, at this point, the rationale outlined here is experimental--although based on extensive experience in both working directly with the target population and training personnel to work with the severely impaired child. Our rationale is based on four interrelated aspects of educational competency which describes the role of the teacher as a conceptualizer, synthesizer, evaluator, and trainer. This model of teacher preparation, which provides the underlying rationale for the training programs content and format, is presented in a chapter entitled, The Generative Teacher: A model for preparing personnel to work with the severely handicapped. (Iacino and Bricker in press). Since only a brief description of the broad competencies included in the training model are discussed here, a copy of the complete chapter may be obtained upon request.

Teacher as a Conceptualizer

The multiplicity of handicapping conditions and their presenting manifestations, the variability of functioning levels both within and across children labeled as severely impaired, are too great to expect any

single educational procedure, any single material or any single prescribed curriculum to be applicable across the entire population. Teachers who are trained to use "cookbook" approaches which emphasize the acquisition of situation-specific responses by following "frozen" curricular sequences will be limited in their effectiveness with the severely impaired child. Rather, teachers of the severely handicapped must approach the educational problems of this population from a broad conceptual base, a base which must take into account not only the optimum content and sequence of instruction within any given domain, but which also must employ flexibility in presentation of integrated training opportunities. If a teacher has an adequate grasp of the content of instruction covered by a particular educational domain and the probable sequence of acquisition, then he/she can more effectively "generate" a program of creative activities relevant for a specific child in a particular learning situation. With an adequate understanding of the content of instruction (behavioral targets) and some idea of effective sequences (developmental hierarchies or task analysis), teachers can generate, both on a preplanned and a spontaneous basis, specific instructional activities which have a higher probability of being effective in all the various intervention situations which constitute a comprehensive, and individualized educational program (IEP).

At least three bodies of information would seem to be important in helping a teacher build a knowledge base for the development of conceptual skills. They are: knowledge of behavioral technology, awareness of developmental processes, and familiarity with the broad content of curricular domains. A working knowledge of behavioral technology is deemed essential since it functions as a basic tool for producing behavioral change. What

is being advocated, however, is a sensitive and discriminating application of this technology to both the individual child and to a specific instructional task.

An effective teacher must wrestle with the difficult task of structuring educational situations which provide adequate environmental cues to elicit the desired behavior (antecedent event manipulation), which facilitate the gradual approximation toward the desired target behavior (response event management) and which provide appropriate environmental feedback on the effect of such behaviors (consequation tactics).

The second major component of a teacher's knowledge base is an awareness of developmental processes. It is possible to argue that we have made the mistake in special education teacher training of creating relatively sophisticated pathologists who can talk at length on various handicapping conditions, but who are unable for example, to describe the language structure of a typical two year old. Surely if the teacher of the handicapped child is to fill the role of a normalization agent as specified by many of our current concepts of "least restrictive environment," then that teacher ought to have some idea of the target--normal development.

Additionally, our traditional assessment batteries and evaluation instruments are of more limited use with the severely handicapped than they have been with any other group of children (Faris, Anderson, and Greer 1976). Typical evaluation summaries for severely/profoundly handicapped children are filled with indications of "not testable" or scores which are so low that they are virtually meaningless. As an alternative assessment strategy we are going to have to rely on evaluations which are built on developmental pinpoints and hierarchies. Some background knowledge of

normal developmental behaviors and progressions must serve as a prerequisite to the effective use of developmental assessments and curricula. Without knowledge of sequential skill development it will be more difficult for a teacher to assess a child's present functioning level and to determine the next appropriate developmental target.

The third major focus of the conceptual base for the teacher is knowledge of curricular domains. As discussed previously, the effective interventionist must be opportunistic. That is, the teacher must seize a naturally occurring environmental situation to assist the child in practicing or building a targeted skill (Brown, Nietupski & Hamre-Nietupski, 1976). The teacher of the severely profoundly handicapped may not have the luxury of consulting curricular guides and artificially scheduling practice in the various targeted areas of a child's program. Rather, the content and sequencing of many skill domains (language, motor, sensorimotor) must be, in essence, carried around "inside the teacher's head" in order to make the most effective use of opportune environmental arrangements.

The additional problems posed by an integrated approach to programming (as opposed to programming from isolated curricular domains), must be carefully considered by a skillful teacher of the developmentally young child. For example, it is often difficult to separate motor from cognitive functioning, or early language from social development, with a low functioning young child. Both content and presentation format (i.e. task performance levels, verbal directions, required sensory inputs) must be carefully evaluated and appropriately modified if the teacher is going to be successful with programming for this population. In order to deal with these types of curricula selection and implementation problems,

teachers of the severely impaired will have to exercise considerable care regarding the selection and modification of existing curricula, and the development of their own materials and methods (Baldwin, 1976).

The Teacher as a Synthesizer

It seems unrealistic to expect any single professional to have the range and depth of skill necessary to develop and implement a comprehensive habilitation program with such a difficult population as the severely/profoundly handicapped (Bricker, 1976). The interactive effects of a child's physical and mental health, his nutrition, and his social environment on his developmental progress make it imperative that the teacher be willing to and capable of actively seeking, evaluating and implementing information from a wide range of professionals. The task of synthesizing information is complicated by the problems associated with the actual implementation of "multidisciplinary approaches." In many cases, private and public educational agencies' commitment to inter- or transdisciplinary models is nominal or non-existent. Many educational delivery systems which have previously conceived of their role as encompassing only "the education of the child," simply do not have the essential resources to provide effective liaison with pediatricians, occupational and physical therapists, communication specialists, nutritionists, psychologists and social workers. While public school systems are beginning to respond to legislative mandates, judicial decrees and consumer pressures to expand the traditional concept of appropriate educational services, the progress toward implementation of full service support systems for teachers of the severely handicapped will, no doubt, be an uphill struggle. Since it is the teacher who will be

confronting these problems most directly, it may become his/her job to effectively educate the administration about the needed support service. Without adoption of an active advocate role, many teachers of the severely handicapped may find themselves without essential program support.

The second difficulty a teacher as a synthesizer will face is the acquisition and evaluation of programmatic inputs from various specialists. Obviously there are some activities which will remain in the province of a highly trained clinician, but it is becoming apparent that many forms of therapy may be effectively carried out by the classroom staff and/or parents. There simply are not sufficient trained personnel in most therapy specialties to meet the demand for their services, and there are fewer still who have a commitment to the severely handicapped. If the remedial effect of these helping professions is to make a significant impact on the severely/profoundly handicapped population, then the highly trained therapist must be willing to actively share his expertise. Rather than always providing direct therapy to each child, the therapist must adopt a role of resource person using the classroom staff and parents as the primary implementors of the rehabilitative program. Personnel preparation programs should be oriented toward facilitating acceptance of such a therapy model. This can be done by insuring that teachers in training are provided with general background information upon which various therapists can rely for basic levels of understanding and communication.

Another diplomatic task of the teacher as a synthesizer involves encouraging specialists to accept and utilize the valuable information which classroom personnel have acquired about a child. Information gathered during a brief evaluation session carried out in surroundings unfamiliar to a child may

yield an inaccurate picture of the child's typical behavior. The classroom staff, however, who spend 5-6 hours a day, five days a week, with a child may be able to provide far more reliable information on a child's typical performance levels.

The final hurdle that the teacher as a synthesizer faces is the coordination of various specialized inputs into a consistant, comprehensive, realistic educational program.

The Teacher as an Evaluator

If there is a common defining characteristic of severely/profoundly handicapped children, it is that their rate of developmental progress is very slow in relation to normal standards. The changes in response quality or rate are often of incredibly small magnitude. Without a rigorous program of evaluation, the teacher of the severely handicapped child will have difficulty with any attempt to assess the developmental progress of his/her children.

The initial evaluation task of a teacher is, of course, assessment of a child's current level of functioning. The purpose of such assessment ought to be the determination of appropriate training targets. Those types of assessment activities which merely define a child as a member of a particular group or rank him in relation to other children, while appropriate for other purposes, have little utility for the classroom program. Generating appropriate training targets is a more important use of the teachers evaluation time and effort. Once such targets are derived there needs to be some system of prioritizing the targets. For the majority of severely involved children, there will be more targets, both acceleration and

deceleration, than can possibly be covered in daily programming. The system that is used to set priorities (e.g. parent concerns, required curricula guides, prerequisites to other programming, life support, etc.) may vary but it is essential that some effort is exerted to assign weights to the various potential interventions.

Once targets have been established and prioritized, intervention strategies can be developed. An integral part of that programming must be the development of a reasonable system to monitor the child's progress toward the objective. There needs to be a built-in descriptive system to monitor change in the child's behavior.

Regardless of the form of monitoring change, to be worthwhile the data collected must be translated into useful program decision information. The generative teacher must be aware of distinction between assessment, measurement, and evaluation because often even conscientious teachers never complete the process; they never go beyond the assessment/measurement stage. Information collected on a child's performance is of little use unless it is related to the child's developmental progress in some way. That Johnny did well today on a task, is a subjective teacher evaluation, that he performed correctly on eight out of ten trials, provides more appropriate information and that his performance is ten percent better today than yesterday and only ten percent away from criterion is the most useful information of all. The generative teacher must focus not only on the current level of performance (be it performance on a daily task or his latest scores on a comprehensive, longitudinal developmental profile) but also on the standards or criteria against which that new information

becomes valuable.

This type of complete evaluation provides interventionists with direct and continuous indications of the effect (or lack of it) of their programs. There is a certain part of programming which requires an educated, and creative guess. Even knowing that some intervention strategies and materials are more likely to be effective with a severely handicapped child, the teacher often must exercise judgements in the creation of a program. In a sense, any given preplanned program is a hypothetical statement to be tested. Only by building an adequate evaluation system into the program will the teacher be assured of the feedback necessary to make decisions on the efficacy of the proposed strategy.

Summary

As a prelude to an actual description of the training program and its sub-components we have attempted to explain the program's underlying rationale. We believe training oriented toward developing a teacher who approaches children from a developmental perspective, who can synthesize a broad range of professional information into an on-going educational program and who can systematically evaluate the effect of intervention is a target worthy of much attention and effort.

An Overview of the Present Approach

The University of Miami's program for preparing personnel to work with severely/profoundly handicapped children is comprised of three inter-related components. As indicated in Figure 1, components 1.0 and 2.0 involve preparation of personnel in both degree and non-degree programs and component 3.0 involves the development of effective training materials for personnel preparation efforts. While each of these components is outlined in detail in the following sections a brief overview is provided here to assist the reader in understanding the structure of the total program.

Component 1.0 (Degree Component)

Under this component, the program enrolls and prepares students to work at various levels of involvement in educational intervention with severely/profoundly handicapped children. Candidates pursuing a Master's in Education degree are prepared primarily for direct intervention roles, either as a classroom teacher or as a direct services therapist (physical therapist, occupational therapist, speech therapist, etc.). Additional candidates pursue a Specialist in Education degree and are prepared primarily for program supervision/coordination roles. All candidates matriculate in a full year program and engage in general educational and specialized program coursework and structured practicum activities with the target population.

Component 2.0 (Inservice (Non-Degree Component)

Under this component the program provides extensive inservice training activities for a variety of local, state, and national agencies.

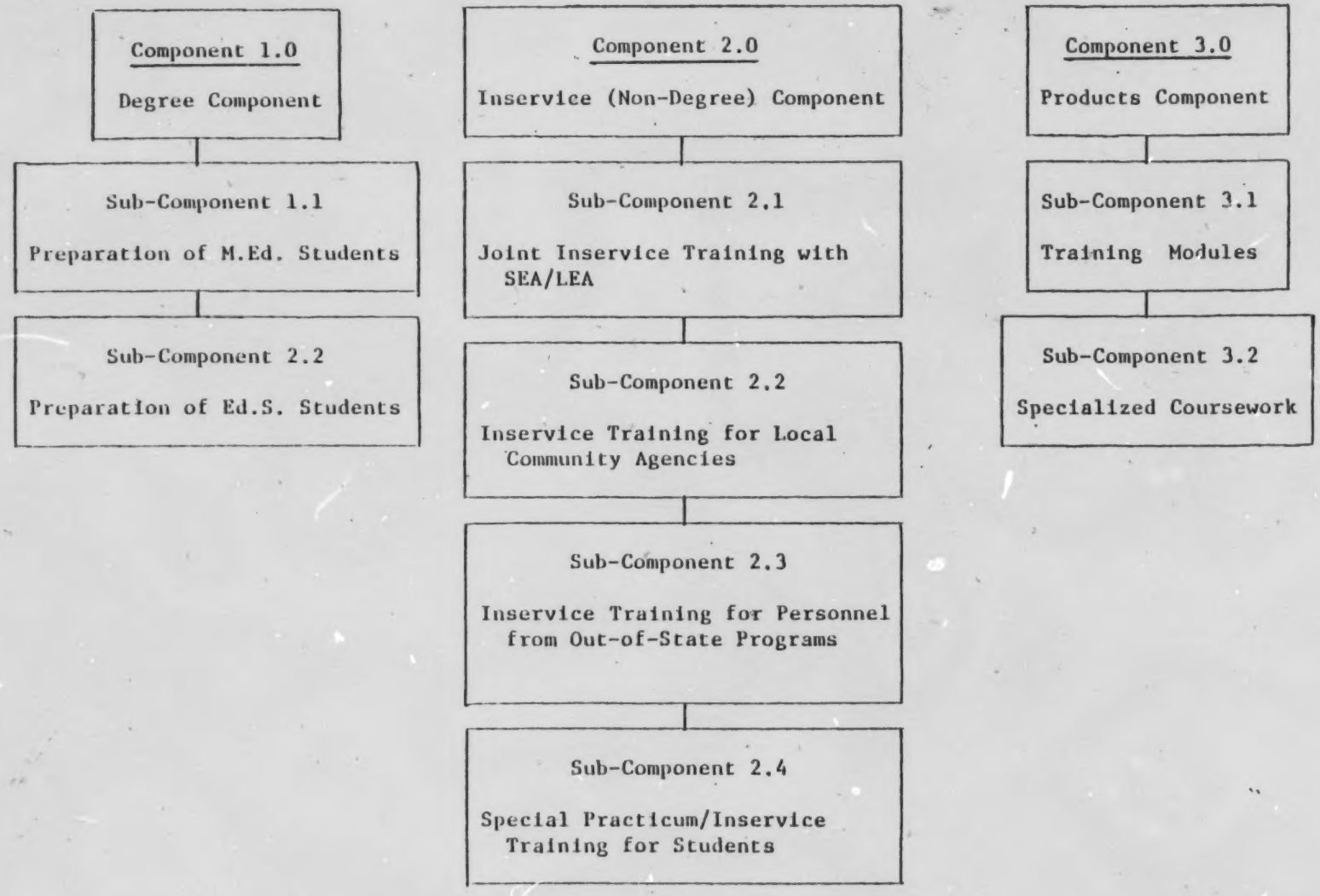

Figure 1. Components of the University of Miami's personnel preparation program.

The personnel targeted for these inservice training activities range from teachers and administrators of programs for the severely handicapped through paraprofessionals working with handicapped preschoolers in day care centers.

Component 3.0 (Products Component)

Under this component the program is developing, field testing and beginning to make available various training and evaluation strategies which are appropriate for training programs focusing on preparing personnel to work with the severely/profoundly handicapped population. There will be two types of products: 1) To develop and make available a series of practicum based training modules covering critical content areas and instructional skills for personnel working with the severely/profoundly handicapped child. 2) To develop and make available extensive descriptions of specialized didactic course work for personnel working with the severely/profoundly handicapped child.

Component 1.0 (Degree Component)

Sub-Component 1.1 - Master in Education Degree Program

This sub-Component is one-year in length.

The primary role for which graduates of this program component are prepared is that of a direct interventionist with the target population of severely/profoundly handicapped children. The direct interventionists can function in, at least, two capacities which is dependent upon previous academic training: a) as a classroom teacher and/or parent trainer who is responsible for providing an appropriate, comprehensive, educational program for children enrolled in the program, or b) as a specialist (e.g., physical therapists, occupational therapists, speech therapists) providing consulting and supervision in his/her specific area of expertise to classroom or home training personnel.

In general, the role of the direct interventionist-classroom teacher/parent trainer encompasses the ability to structure an appropriate program for the target population both in school and at home. This entails being able to plan and coordinate daily activities, develop curricular content, work effectively with other staff, and evaluate the effectiveness of the program. The direct interventionist-specialist plays a vital role in the education of the severely/profoundly handicapped. As discussed previously, there is a need for inputs from a variety of disciplines to develop and implement appropriate programs for this population. Often licensed therapists seek additional training in the area of special education in order to perform their role more effectively within a public school or other similar setting. As described above, their role is to provide supervision of teaching personnel and/or parents.

Most graduates of this program component find employment in either public school programs or other state supported agencies that provide educational services for the severely/profoundly handicapped child. Because of the emphasis of this program on young children, program graduates are particularly well suited for positions serving the preschool or elementary-age severely/profoundly handicapped child.

This training program is built on a model that conceives of teacher performance in five broad task areas: direct intervention with children, direct intervention with parents, coordination of multiple resource inputs, development of curricular material, and evaluation of the program. Each of these tasks and their associated competencies are described below.

Direct intervention with children

The most obvious and traditionally accepted task of a teacher is to provide direct intervention to the target children. A comprehensive intervention program for young children should contain programs in all major curriculum areas. We have divided our curricula into four domains: language, cognitive, social/self-help and motor. The specific tasks associated with these domains are relatively uniform. Teachers should be able to assess a child's present level of functioning; to develop a program which targets the next appropriate developmental step in the sequence; to implement that program using principles of behavior management and to evaluate the effectiveness of the program. The actual content to which these processes are applied would, of course, differ from domain to domain.

To implement the specific training tasks outlined above assumes that the teacher has certain competencies in the target domains as well as programming and behavior management skills. For instance, in order to identify the

subcomponents of a training program which targeted pre-requisite linguistic processes, a teacher would need to understand the hierarchical levels of imitation (i.e. sporadic, systematic, familiar, novel, or deferred) to know the nature of imitative modes (i.e. fine motor, gross motor, or verbal) to be familiar and practiced at the techniques of training (i.e. prompting, mutual imitation) and to apply some effective methods for evaluating the initial level of performance and subsequent improvement following training; for example, the Ordinal Scales of Psychological Development (Uzgiris & Hunt, 1975). Similarly, a training task in the motor domain might be the exercising of basic reflexes. For this particular task, the teacher needs to have a variety of competencies, including theoretical understanding of the muscle system, knowledge of the elicitation of absent but needed reflexes, the inhibition of competing and inappropriate motor responses, and an appreciation of the basic precautions that must be adopted when working with motor impaired children. The basic structure of the tasks remain relatively constant across curriculum areas, but the associated competencies change depending upon the content area.

Direct intervention with parents

Traditionally public schools have not considered the training of parents within their domain of responsibility. However, when one deals with the severely impaired child the necessity and efficacy of including parents in the intervention plan becomes obvious. Educational intervention with a severely or profoundly handicapped child can often require a one-to-one ratio for particular training tasks, such as self-feeding. When parents can assume the training of various tasks both in the home and in the classroom, the child is then presented with a more consistent training environment, and the teacher

is freed to work with a greater number of children. Unless parent training personnel are available, teachers will have to assume the responsibility of coordinating school-based activities with those activities which occur at home, which implies training the parent to execute the home-based programs.

Tasks associated with parent training include: providing limited counseling support; serving as a liaison between multiple agencies which provide services for the child; and, most importantly, serving as a model child trainer. The competencies which are required to perform these specific tasks are directly derived from the subtasks themselves. One of the foci of parent training is the assistance a teacher can provide in enabling parents to become effective change agents with their child. The competencies a teacher needs in this area are similar to those specified in the direct intervention section above. For example, just as a teacher may use modeling to teach a child a particular task, being an appropriate model is also an effective way to educate a parent. However, additional competencies are necessary in dealing with adults. For example, teachers need to be aware that parents function at different levels as do children and that assessment of parents' entry behavior is necessary prior to intervention.

Coordination of multiple resource inputs

The concept of a teacher as an isolated change agent within a single classroom setting is not an acceptable approach with a group of children who have wide ranging and severe handicaps. The teacher needs to have or seek assistance from a variety of experts such as speech pathologists, physical therapists, counselors and physicians, and then be able to use the information effectively. The competencies that allow a teacher to serve as a synthesizer and coordinator of appropriate professional inputs includes an understanding

of various professional views of child development, acceptable intervention strategies, and some basic familiarity with the vocabularies of other disciplines.

Curricular development and modification

Because few appropriate curricular materials currently exist for the severely impaired child and because prepackaged materials may never be entirely useful for this population, it is imperative that teachers be able to modify existing materials to suit their needs as well as to develop new curriculum materials (Baldwin, 1976). Teachers need to be able to program at various levels; this might range from the development of an appropriate curriculum from a theoretical or research source to preplanning daily lesson plans. Some of the competencies necessary for program development and modification include competencies in the specification and arrangement of antecedent events, specification and production of response differentiation, and specification and administration of appropriate consequation tactics.

Evaluation

A final task assignment for the master's program centers on evaluation. Teachers must have a working knowledge of assessment methods which are efficient, reliable and valid. Evaluation procedures need to underlie all major components of an intervention program in order to objectively gauge both the individual and the overall effect the program is having on the children enrolled. Evaluation competencies include the ability to assess children using appropriate standardized instruments (or be able to interpret results of tests given by other professionals), adaptative scales, and observational techniques. Teachers need to be familiar with various methods of collecting data and monitoring a child's progress in specific curriculum

areas (e.g. precision teaching).

The learning activities which have been designed to prepare the M.Ed. candidate for roles described above fall into two broad areas: didactic and practicum. The didactic activities included general coursework in the areas of special education, a specialized core program emphasizing content relevent to educators of severely impaired populations, and electives which serve to more fully develop the student's competencies as effective interventionist. Practicum activities include a structured series of content/process modules which are carried out in various practicum sites.

DIDACTIC:

The M. Ed. course of studies with an emphasis on the severely/profoundly handicapped child offered by the University of Miami is outlined in Table 1. This course of studies has been developed to insure a balance between general, specialized and elective coursework. The University's Master of Education degree core courses are required of all candidates regardless of their area of specialization. These general core courses are designed to provide graduates with a background in the theoretical basis of education. The specialized core courses for the area of the severely/profoundly handicapped program are required of all candidates enrolled in this program and are designed to provide the necessary content and conceptual background for the education of the severely/profoundly handicapped population. The students may also select from a wide variety of elective courses from departments within the School of Education (e.g., Early Childhood Education, Counseling and Guidance, Physical Education) and from other academic departments such as Psychology, Communication Sciences, and Sociology.

TABLE I

Course of Studies for M.Ed. Program - Emphasis on Severely/Profoundly Handicapped

General Core Course	Title	Credits
EDP 601	Essentials of Educational Research	3
EDP 605	Psychological Basis for Education	3
EDP 602	Education in American Society	2
Specialized Severely/Profoundly Core Courses:		
EDP G538	Instructional Procedures with the Severely Handicapped	3
EDP 640	Seminar in Special Education ..... (Developmental processes and the Severely/Profoundly Handicapped)	3
	Seminar in Special Education ..... (Issues and special problems of the Severely/Profoundly Handicapped)	3
	Seminar in Special Education ..... (OT/PT/Medical/Nutritional/Speech Therapy techniques for interventionists)	3
EDP 642	Field Experience in Special Education .... (Classroom experience with Severely/Profoundly Handicapped)	3
	Field Experience in Special Education .... (Parent Education/Public School placement)	3
	Field Experience in Special Education .... (Specialized Project with Severely/Profoundly Handicapped)	2
EDP 640	Early Intervention with the Handicapped Child...	3
ELECTIVE COURSES:		
EDP G504	Educational Measurement	2
EDP G536	Education of Exceptional Children and Youth.....	3
EDP G531	Speech and Language Problems in the Schools	3
EDP G532	Nature and Needs of the Mentally Retarded	3

cont'd .....

Table 1 Continued

Elective Courses continued .....

EDP G534	Methods and Materials in Teaching the Phys. Handicapped	3
EDP 615	Survey of Research Needs in Education	3
EDP G535	Methods and Materials in Teaching the Mentally Retarded	3
EDP 603	Educational Statistics	2
EDP 613	Advanced Statistical Methods	3
EDP 611	Advanced Research Methods	3
	Sub Total	8-12
	Grand Total	32-36

Course outline for the core specialization in the severely/profoundly handicapped are provided here to detail more fully the exact content and scope of this coursework.

EDP G538 Instructional Procedures for the Severely/Profoundly Handicapped

Overview:

The primary purpose of this course is to provide content background in the areas of instructional procedures which are relevant to educational intervention strategies with a severely/profoundly handicapped child. The course focuses on adaptation of instructional content, procedures, and materials to insure that they are effective with this specialized population. The following specific topics are covered:

Topic	Content Description
Introduction to Course	Review of course scope and requirements; rationale for this approach (Generative Teacher).
Behavior Technology I Behavior Technology II Behavior Technology III	This series of lectures will cover the basic content of behavioral technology. Included will be operant vs. classical conditioning, response differentiation, antecedent event manipulation, consequation tactics.
Assessment I	Assessment as a generic concept, issues of validity/reliability, standardized instruments.
Assessment II	Emphasis on a more developmental and functional approach to assessment.
Programming I	The generic concept and components requirements for IEP.
Programming II	Development of long/short term objectives, setting appropriate priorities.

Evaluation I	Types of data collection, methods for display.
Evaluation II	Interpretation of data, artifacts of measurement systems, decision rules.
Review	Construction of actual IEP complete with all components in detail; the purpose of this lecture is to insure that students understand the relationship of assessment to programming and evaluation.
Classroom Management	Practical aspects of developing and implementing a classroom program, staff management, scheduling, materials.
Emergency Medical Procedures	Specification of types of emergency procedures which include, resuscitation, seizure management, drug administration.
Curriculum Development	Overview of curriculum development; methods for evaluating existing curricular material, strategies for modification.
Language System	Overview of the generic structure of a language system, with emphasis on the function of communication.
Alternative Communication Modes	Overview of alternative modes for communication: speech, signs, symbols, prosthetic devices.
Approaches to Toilet Training	Presentation of various approaches to toilet training with the severely/profoundly handicapped population.
Life Survival Skills	Presentation of various methods of developing basic care skills (grooming, sex education, etc.) with the severely/profoundly handicapped.
Approaches with Multiple Sensory Handicaps	Presentation of methods for use with sensory involved severely/profoundly handicapped children.
Positioning	This series of two lectures will emphasize practical classroom techniques which can be used by staff who have little or no PT/OT assistance.

Coordination of Parent Resources in a Classroom Setting	This series of two lectures will emphasize the importance of parental involvement in a comprehensive intervention program for the severely/profoundly handicapped child.

Educational Psychology 640 Seminar in Special Education - Developmental Processes and the Severely/Handicapped Child

Overview:

The purpose of this course is to provide the student with background information on normal developmental processes and to contrast these with the specialized adaptations made by the severely/profoundly handicapped child. The course focuses on a review of the developmental literature, specifically on issues relevant to intervention with the handicapped.

Topic	Content Description
Early Development	A review of the physiological processes of pre/perinatal development. Emphasis on common complications and their potential effect on developmental progress in the future.
Early Learning	Review of the recent literature for early learning, memory and perception. Topics of habituation, classical and operant conditioning in neonates, and perception studies with young infants are emphasized.
Piagetian Theory	This series of lectures discusses Piaget's developmental cognitive theory. Emphasis is placed on the sensorimotor period with a more general review of the pre-operational, period and the periods of concrete and formal operations.
Development of Motor Skills	This series of lectures provides a basic vocabulary/concept background in normal motor development. Emphasis on muscle systems, important innervations, reflexes. Normal development is contrasted with frequently observed abnormal patterns.

Language Development	This series of lectures provides the student with a historical perspective on language theory and research. Reviews major theories of language development (psycholinguistic, behavioral). Topics such as pragmatics and social aspects of language, sensorimotor and symbolic correlates to language development are discussed.
Social Development	This series of lectures reviews, from a historical perspective, important early influences in the field of social development, early attachment, parent-infant interactions, development of affect, and peer-interaction.
Research with the Severely/Profoundly Handicapped	This series of lectures provides the students with a thorough overview of the recent research literature on developmental issues which have been used with the significantly impaired child as a subject.

Educational Psychology 640 Seminar in Special Education - Issues and Problems in the Education of the Severely/Profoundly Handicapped Child

Overview:

The purpose of this course is to provide the student with a broad overview of education for the severely/profoundly handicapped child and an indepth analysis of the current issues and problems that are being confronted. The course will focus on the delination of issues accompanied by discussions of the best currently available solutions.

Topic	Content Description
Historical Treatment of the Significantly Impaired Individual	A review of treatment of the handicapped individual beginning with pre-christian era but focusing on 1850 to 1977 and implications for present treatment.
A Model of Comprehensive Service for the Severely/ Profoundly Handicapped	A discussion of the necessary components for a comprehensive program which include: rationale, personnel,

	curriculum, instructional procedures, ancillary staff, and evaluation.
Role of the Federal Government in the Education of the Severely/Profoundly Handicapped	Historical involvement of the government will be presented with an emphasis on its current role at local, state and federal levels.
Legal Issues Concerning the Severely/Profoundly Handicapped	A discussion of relevant court decisions, and their current and potential impact on the field.
Educational Approaches to Severely/Profoundly Handicapped	An overview of major approaches to education of severely/profoundly handicapped child including discussion of specific projects such as, Portage Project, Badger School, Experimental Education Unit.
Curriculum Considerations	A discussion of problems found in using existing curricula, modification and/or development of new strategies or content.
Personnel Consideration	A discussion of the requirements of the direct intervention and the necessary ancillary personnel to operate comprehensive programs.
Role of the Public School in Reference to the Severely/ Profoundly Handicapped	A discussion of the impact on public education including the severely impaired child and how to cope most facilitatively with that impact.
Problems in the Assessment and Evaluation of the Severely/Profoundly Handicapped	A discussion of the major problems encountered when attempting to measure performance or progress of a severely impaired child.
Research with the Severely Impaired Individual	A discussion of the research conducted with this population, the results and trends of this research and future implications.
Early Intervention	A discussion of the rationale for intervening early and a presentation of a variety of currently operating programs.

Educational Psychology 640 Seminar in Special Education - The Educational Synthesizer

Overview:

The purpose of this course is to provide the student with background content and practical techniques to assist in their becoming an effective educational synthesizer. Specifically, information will be provided by a physical therapist, communication specialist, nurse practitioner, nutritionist and parent interventionists in his/her area of expertise.

Topic	Content Description
Physical Therapy	A discussion including information on and procedures for positioning, relaxing, and exercising.
Health Care and Problems	A discussion of procedures for monitoring health; emergency procedures; health problems and solutions.
Nutrition and Feeding Problems	A discussion of strategies for better feeding techniques; feeding and food problems and solutions.
Parent Involvement	A description of how to structure and implement a program.
Communication Problems	A discussion of neurological problems and facial anomalies as they relate to communication problems.

Relationship of Learning Activities to Competencies

Below is a broad overview of which didactic coursework relates to the individual tasks/competencies that are outlined in the previous section.

Task I: Direct Intervention with Children

EDP 531, 538, 536, 609, 617, 640, 642

Task II: Direct Intervention with Parent

EDP 538, 611, 640, 642

Task III: Coordination of Multiple Resource Input

EDP 531, 611, 642, 646

Task IV: Curricula Development and Modification

EDP 601, 538, 609, 642, 645

Task V: Evaluation

EDP 538, 601, 642, 662, 663, 664, 666

Additionally, special care is given when planning a student course of studies to insure whenever possible that didactic coursework which is most relevant to practicum activities is taken as prerequisite or concurrently.

Practicum

The practicum learning activities that are to be included as the experiential counterpart of the didactic coursework are discussed in this section. Although we feel that coursework is vital in providing an underlying conceptual base and information in specific content areas, the special emphasis of this training program lies in the knowledge and expertise which students gain from structured involvement in the ongoing classroom, parent involvement, and evaluation activities.

To reduce the potential for overlapping experiences and to insure that all programmatic aspects which might be of importance in practicum planning are covered, a matrix representing the major content areas and skill variables (broad competencies) has been developed. This matrix, presented below is composed of both content and programmatic skill variables which appear to be relevant to effective intervention with the target population.

COMPONENT: CLASSROOM:

A. Introductory Module
B. Observation Module
C. Motor Movement Module
D. Feeding Self/Help Module
E. Cognitive Module
F. Language Module
G. Lead Teaching Module

CONTENT AREAS	Intervention skills: OBSERVATION	ASSESSMENT	DEFINITION	INTERVENTION	EVALUATION	MODIFICATION		Communication Skills: TECHNICAL WRITING	ORAL PRESENTATION	FACILITATION	TRAINING		Synthesizing Skills: INFORMATION ACCRUAL	ORGANIZATION
Human growth and development														
Curriculum														
Behavioral technology														
Time, Space, Mater.,Equip,														
Programming														

COMPONENT : PARENTS

A. Parent Training Module
B. Professional/Personal Development Module

CONTENT AREAS	Intervention skills							Communication Skills					Synthesizing Skills	
	OBSERVATION	ASSESSMENT	DEFINITION	INTERVENTION	EVALUATION	MODIFICATION		TECHNICAL WRITING	ORAL PRESENTATION	FACILITATION	TRAINING		INFORMATION ACCRUAL	ORGANIZATION
Human Growth and development														
Behavioral technology														
Ethics														
Interpersonal and Group Dynam/														
Family HIstory & Home Environ.														
Programming														
Recruitment and location														
Advocacy														
Curriculum														

COMPONENT: ANCILLARY & SUPPORT:

A. Standards & Program Maintenance Module
B. Standardized Assessment Module
C. The Art of Grantsmanship Module

CONTENT AREAS	Intervention skills							Communication Skills				Synthesizing Skills	
	OBSERVATION	ASSESSMENT	DEFINITION	INTERVENTION	EVALUATION	MODIFICATION		TECHNICAL WRITING	ORAL PRESENTATION	FACILITATION	TRAINING	INFORMATION ACCRUAL	ORGANIZATION
Interaction/other disciplines													
Comm. Res. & Soc. Serv. Sys.													
Standards													
Transportation													
Administrative													
Food Services													
Materials & Maintanance													
Financial/fiscal													

The content areas have been divided into three major components: a) classroom, b) parents, and c) ancillary/support. Under each of these major components have been listed the Modules which are being developed and the necessary content areas which have, in turn, been subdivided into specific topics:

CLASSROOM

1. Human growth and development--

   Knowledge of the theories of the nature and determiners of human growth and change, and the sequence of development.

2. Behavioral technology--

   Knowledge of the functional analysis of behavior and the relationship of antecedent, response, and consequent events.

3. Curriculum--

   Knowledge of both the curricula being developed here in the Debbie School as well as others currently in use throughout the country with the developmentally young population.

4. Programming--

   Knowledge of the various formats used to program educational goals for children ranging from global comprehensive planning to specific intervention design.

5. Time, space, materials, equipment and people--

   An understanding of the function and potential effect of using each of these variables in classroom management and child change.

PARENTS

1. Interpersonal and group dynamics--

   Knowledge of the various analyses of group and interpersonal behavior and an understanding of the various techniques to elicit and maintain behavioral change.

2. Family history and home environment--

   An understanding of the importance of past and present environments and events as potential determiners of behavior.

3. Location and recruitment--

Knowledge of resources which can assist in the recruitment process; also an understanding of the restrictions which funding agencies may mandate for program population, exposure to strategies which have high probability for success.

4. Advocacy--

An understanding of the litigation and legislation which effect the rights and education of handicapped children and their parents.

5. Ethics--

An understanding of the child and family's right to privacy and dignity and the professional conduct necessary to maintain these rights.

ANCILLARY/SUPPORT

1. Other disciplines--

A knowledge of the vocabulary and scope of each of the following disciplines and how they may be able to relate to the field of education of the handicapped child:

Medicine
Physical therapy
Nutrition
Communication disorders
Psychology
Guidance and counseling

2. Community resources and social services system--

Knowledge of the various systems available in the community to assist the family in finding environmental, affective or educational services.

3. Standards--

Knowledge of the various program quality and administrative standards required by the federal, state and local monitoring agencies for program operation.

4. Transportation--

An understanding of the critical nature of transportation systems in an educational program for handicapped children and the

variables which influence this system. Also, a knowledge of the differing types of transportation systems available to the child and the family.

5. Administrative--

   An understanding of the various administrative functions which a system providing for severely/profoundly handicapped children must have to operate efficiently.

6. Food services--

   Knowledge of the procurement and management tasks necessary in food service preparation and the variables involved for efficient program function.

7. Materials and maintenance--

   Programmatic support for commodities, equipments and supplies necessary to institute and maintain effective comprehensive programming for severely/profoundly handicapped young children.

8. Financial/fiscal--

   Knowledge of potential federal, state and local funding sources which provide fiscal support to educational programs. Familiarity with grants process and strategies for fiscal monitoring.

The second major variable of the matrix includes skill areas which have been divided into three major groupings: a) intervention skills, b) communication skills and c) synthesizing skills. Intervention skills are behaviors which are necessary for the assessment, intervention, and evaluation of systems, which may range from a simple behavioral change in a child to the smooth operation of a transportation system. Communication skills are those behaviors which enable the student to effectively communicate both in writing and verbally. The subskill areas are oral presentation, technical writing, and facilitation. Synthesizing skills are perhaps the most difficult to define yet may be the distinguishing feature between a good teacher and a great teacher. Basically, these skills should provide the student with the ability to effectively and efficiently acquire all necessary information about a problem, organize a

solution or a hierarchy of solutions, and follow-through on the resolution of the problem making sure that all systems which may impact on that problem or solution are notified. The two subskill areas are information accrual and organization. Each of these twelve (12) subskills are defined below:

OBSERVATION--

The discrimination of categories of behavioral or environmental events within each content area. The categories are to be objectively describable and the discrimination must occur across various loci.

ASSESSMENT--

The measurement or quantification of a given behavioral or environmental event. This skill also includes a definition of the purpose of the assessment, a decision concerning which assessment tool is appropriate, and the actual presentation of the instrument.

DEFINITION--

A function of the two previous skills, assessment and observation, definition also includes a decision-making aspect. This includes, priortizing the information gained from the assessments and observations, consideration of the hierarchy of possible interventions, setting goals for intervention--both long term and short term describing the existing behavior objectively, the type of intervention to be employed, an objective description of the intervention (who will do it, what they will do, where it will be done, what equipment will be used, when it will occur, which intervention strategies will be used, and why this particular constellation of events will be used in this intervention situation), and decisions about collection of data.

INTERVENTION--

Manipulation of behavioral or environmental events to cause or prevent a change in the behavioral or environmental event toward a stated objective (long term/short term). This includes decisions about and actual implementation of intervention and data collection for a stated period of time, necessary graphing and/or appropriate record keeping, and notation of aspects of the intervention which are not practical or amenable to a quantitative data collection process.

EVALUATION--

The application of systematically derived decision rules of information which has been systematically collected about specific behavioral or environmental events. This includes the posing of alternative actions which can be implemented based upon the information available, probability statements regarding the outcome of the alternative actions and choosing the action of be implemented.

MODIFICATION--

The reimplementation of the intervention processes based on the decisions made during the evaluation process. This includes all aspects described within each of the skill areas described above, such as consideration of the hierarchy of possible interventions, redefining goals for intervention, etc.

TECHNICAL WRITING--

The written professional presentation of materials, observations, etc., in a clearly defined, logical manner, using appropriate terminology.

ORAL PRESENTATION--

The verbal presentation of materials, observations, evaluation, etc., in a clearly defined, logical manner with terminology appropriate to the audience.

FACILITATION--

Discrimination, definition, and arrangement of events so that adults will communicate and/or behave in a desired manner. This skill, which is often spontaneously employed, includes evaluation and modification of the applied strategies for change.

TRAINING--

Effecting a behavioral change in another adult in each of the different skill and content areas. This differs from facilitation in that all aspects of the trainee/trainer interaction are overt and the trainee's behavior is observed, assessed, defined, subject to intervention, evaluated and hopefully, modified. This also differs from facilitation in that data is likely to be collected on many aspects of the trainee's behavior.

INFORMATION ACCRUAL--

Efficient, effective and accurate techniques of information gathering and use of resources in a particular content area.

ORGANIZATION--

The analysis, synthesis, and evaluation of all aspects of a particular content area so that all time, material, space and personnel are conserved.

Once the content and skill variables were determined, divided into specific areas and defined, it was possible to build the matrix. The content areas form the vertical axis while the skill areas formed the horizontal axis which is duplicated across the three major components. While conceptually it is possible to develop a training activity in modular form for each intersection point, practically this is less than optimally efficient.

Table 2 indicates the Modules which are presently being developed.

TABLE 2

TRAINING PROGRAM MODULES

PRACTICUM MODULES	SEMESTER OFFERED	CREDITS OFFERED
A. INTRODUCTION	Semester I, September	
B. OBSERVATION	Semester I. September	
C. GROSS MOTOR	Semester I. October	
D. FEEDING/SELF HELP	Semester I. October	
E. SENSORIMOTOR	Semester I. November	
F. LANGUAGE	Semester I. December	
G. LEAD TEACHING	Semester I. & II December - January	3 credits for (A-G)
H. PARENT TRAINING	Semester II February through May	3 credits
I. INDIVIDUAL PROJECTS	Semester III. & IV. June and July	2 credits for M.Ed. students only
J. PROFESSIONAL/PERSONAL DEVELOPMENT	Semester I-IV.	NO GRADE Attendance required for practicum credit
DIDACTIC MODULES		
K. #640, HUMAN GROWTH & DEVELOPMENT	Semester I	3 credits
L. #G538, TEACHING THE SEVERELY HANDICAPPED	Semester I	3 credits
M.		
M. #640, SEMINAR IN SPECIAL EDUCATION	Semester II	3 credits
N. #G592 WORKSHOP IN INTER-DISCIPLINARY PROCESS	Semester III	3 credits

Students will go through the modules in sequential order as outlined in the table. Students are evaluated in each module based on their ability to apply content information and those skills outlined in the matrix as necessary to interact and be effective change agents.

The development of the modules has followed a specific format which is indicated below:

1. Goal of the module
2. Prerequisite behaviors and relevant modules
3. Objectives and subobjectives
4. Time sequence in relationship to other modules
5. Glossary of terms
6. Training activities and sequence
7. Recycling procedures
8. Evaluation procedures

The development of such comprehensive training modules is time consuming and demands the concerted effort of the training staff. All modules will be field tested with students in the selected practicum setting, evaluated for effectiveness, and modified as necessary to insure optimal practicum experience.

Coordinator of Didactic and Practicum Learning Activities

While the constraints of University scheduling and the availability of practicum placements often pose extensive program scheduling problems, the staff of this training program have attempted to coordinate didactic coursework, practicum placement and structured module presentation in the most effective manner possible. Table 3 indicates how all the learning activities, both didactic and practicum are scheduled to provide a consistent, structured, logical progression of skill development for trainees. The School of Education has indicated a willingness to be flexible when scheduling specialized program core courses to most effectively meet the needs of the trainees.

Table 3

Didactic and Practicum Schedule

Semester I Fall	Week 1	Weeks 2-4	Weeks 5-7	Weeks 8-10	Weeks 11-13	Weeks 14-16
COURSE WORK:						
Educational Research 3	Course outline, goals, and criteria	Overview of the field	Orientation to quantitive procedures	Research design	Analysis and interpretation	Construction of proposal
Child Development 3	Course outline, goals, and criteria, Prenatal Development	Early Learning, Memory Perception	Growth and development of the physical structures	Piaget's Theory, Sensorimotor Development, pre-operational and later development	Growth and development of the psychological structures	Personality development overview of theraputic interventio research wi S/PH
Teaching Methods 3	Course outline, goals, and criteria	Operant Technology	Programming concepts	Evaluation concepts	Overview of the curriculum areas	Overview of available curricula a constructio
PRACTICUM:						
Sequence and content of modules	Inservice	Inservice and observation module	Gross/Fine motor development module	Feeding/Self-Help module	Sensorimotor Module	Language and Alternative Communicati System Modu
Communication group			Introduction to importance of communication skills	Intake procedures, interviewing, values clarification	Communication systems, counseling techniques	Constructive confrontation, role-playing
Placement	Inservice	Observation in each classroom	Assigned classroom	Assigned classroom	Assigned classroom	Assigned classroom

Table 3 Continued

Didactic and Practicum Schedule

Semester II Spring	Weeks 1-3	Weeks 4-6	Weeks 7-9	Weeks 10-14	Weeks 15 & 16
COURSE WORK:					
Seminar in the Education of the S/P Handicapped 3	Historical Perspective and Current Educational Approaches	Legal and Legislative Issues	Developmental Interaction	Programming	Ancillary Services
PRACTICUM:					
Sequence and content of modules	Significance of assisting family of the handicapped child and effect of handicap on family	Generalized approaches to assisting the family	Working with a culturally varied population	Special Education Programs with Parental Involvement	Parent Training as a profession
Placement	Parent Interventionist	Parent Interventionist	Parent Interventionist	Parent Interventionist	Parent Interventionist

Table 3 Continued

Didactic and Practicum Schedule

Semester III & IV Summer	Weeks 1-2	Weeks 3-4	Weeks 5-6	Weeks 7-16
COURSE WORK:				
Educational measurement	Concepts of validity and reliability	Basic statistical concepts	Instruments utilized in education	
Workshop in the Education of S/P Handicapped	Physical Therapy and Health Care Problems	Nutrition and Feeding Problems	Parent Involvement and communication problems	Curriculum development and modification
PRACTICUM:				
Individual Project sequence and content of modules	Standards Financial/Fiscal Administrative	Food Services Transportation	Interaction with other disciplines	Technical writing Oral presentation Training
Placement	Ancillary Services	Ancillary Services	Ancillary Services	Varies with Student interest

The Mailman Center's Debbie Institute is in a position to offer quality practicum placements for the trainees of this personnel preparation program. In keeping with the primary mission of University Affiliated Facilities, programs within these facilities must provide service, training and research options. The educational intervention programs that have been developed within the Debbie Institute provide an extraordinarily appropriate and convenient collection of practicum sites for trainees preparing to work with the severely handicapped child. Descriptions of these programs are provided below.

Primary Practicum Sites

1. Model Center program for severely/profoundly handicapped children.

In July, 1975, the Mailman Center for Child Development was awarded a three year grant from the Bureau for the Education of the Handicapped to develop a model demonstration program for severely/profoundly handicapped children from birth through five years of age. This model service program offers an extraordinary practicum opportunity for students focusing on severely impaired children.

This program is housed in a double classroom setting in the Debbie Institute which is also the central location for students engaged in this proposed training program. Because Dr. Diane Bricker, serves as the principal investigator on the Model Centers program, the administrator of the Debbie Institute, and also project director for this training program, the coordination between these projects can be maximal. As a result of these circumstances, access to the Model Center program is

immediate and complete. The logistics are such that no time need be lost in students moving about the city or county for practicum placement. The location of the primary practicum sites within one setting also assures more consistent and probably more thorough supervision of students.

The Model Centers program serves 25 children who range in age from birth to five years. The population of the greater Miami area is over two million and therefore locating a group of significantly impaired children has not been difficult. The majority of children enrolled in this program have suffered some extreme trauma during the conceptual, prenatal or birth period and almost all were clearly detectable soon after birth. Most of the children are functioning at an extremely primitive level and most have significant physical and sensory deficits (i.e. deaf, blind, severely spastic). This is a challenging population and one that can provide excellent training possibilities.

This program has three major components: classroom, parent training and evaluation. Each of the two classroom units is staffed with a lead teacher, an assistant teacher and an aide. Their basic responsibilites are to develop and implement the best educational program possible for each child enrolled in their class. The research conducted in these units is focused on classroom training procedures and content, particularly in the areas of language and sensorimotor development. The second component is the parent training unit which is designed to generate data that will assist in developing effective training programs for parents and/or caregivers of developmentally delayed children. The problems studied are those generated by the difficulties encountered by the parents of severely handicapped children. This component is divided into three basic resources for

parents: individual training, small group training and special counseling services for particularly involved problems or family situations. The staff for this unit is composed of a cadre of full-time parent advisers who do the individual and small group training and an evaluation specialist who handles the major goal of establishing an objective system to gauge the effect of the intervention on the target population and their families.

2. Early Intervention Program for moderately to severely handicapped infants, toddlers and preschoolers.

This program is also located in the Debbie Institute and is supported by the State Division of Retardation and the Mailman Foundation. Thirty-two moderately to severely impaired infants and toddlers are served in this program. The infants are selected because of probable retardation due to genetic factors (e.g. Down's syndrome), birth injuries, prenatal problems, and other forms of trauma associated with birth. The toddlers include children who are functioning developmentally in the 18 to 35 month range. The preschool program covers the developmental range from 36 months to approximately 50 months. As in our previous program at Peabody College, this program is noncategorical in that it serves children with a variety of problems and disabilities.

For the most part this program parallels the structure and operation of the Model Centers program except that the children served are generally less impaired. This program is housed in two classrooms each staffed by competent educational personnel. Combining resources from this program, the Model Centers program, and the Mailman Center allows the provision of such important services as: transportation, lunch program, nutritional counseling, physical therapy, audio-visual resources and a

variety of medical consultants. All of these adjunctive services are structured to allow and encourage student participation.

3. Dade County Public School Demonstration Program for severely/profoundly retarded school-aged children.

One public school severely/profoundly handicapped classroom is housed in the Debbie Institute specifically to serve as a demonstration site and a well-structured, carefully monitored training base. This classroom currently serves as the primary practicum placement for teachers statewide who are newly assigned to units for the severely/profoundly handicapped child. It is within this unit that our program's trainees will receive their primary practicum training with the older school age severely/profoundly handicapped child. Many of the other Dade County Public school units for the severely/profoundly handicapped are now staffed by graduates of this personnel preparation program which enables us to place students in a variety of classrooms where the underlying philosophy and program structure is genuinely amenable to the practicum and didactic instruction.

This program follows a daily public school routine in which some time is spent on small group activities, but the predominate effort is toward individual work since the population demands this. As with the previously described programs, training parents to become effective change agents with their children is an important goal. Considering the target population of this training program, this project provides an ideal practicum site.

Secondary Practicum Sites

1. Developmentally Integrated Headstart program.

Recently, Federal Funding Agencies have mandated that Headstart programs serve handicapped children. In order to meet this requirement the Dade County Headstart Agency in conjunction with the Mailman Center has initiated a demonstration program to be housed in the Debbie Institute. This program will serve 20 low-income children who range in age between three and five years.

As mentioned earlier, this classroom will not be a primary practicum site for this proposed training program but will provide an opportunity for students to become tangentially associated with programs for less impaired children.

An additional use of this program for trainees will be as a site to develop competencies as trainers. This year this Headstart program will serve as a training base for Headstart teachers who wish to gain some exposure to handicapped children and information on effective strategies for programming for a developmentally integrated group. Trainees in the personnel preparation program in particular, Ed.S. candidates, will be encouraged to assist in this Headstart inservice training program in order to gain some exposure to the problems of training other teachers.

2. Toddler Early Education Program - First Chance Program

This program is a joint effort of the Dade County Public School, Mailman Center's Debbie Institute, and BEH. The program serves 36 children ages 2 to 4 years in three classroom units. The handicapping conditions represented include a wide variety of sensory, motoric and intellectual disabilities. Two of the classroom units are located in a Dade County Public School site, the third unit is located in the Debbie Institute, thus enabling ready access for program trainees who wish to gain some

additional practicum experience with moderately impaired children. Again, let us emphasize that in all cases elective practicum with the less severely handicapped is in addition to placement within the primary practicum sites for the severely/profoundly handicapped child.

3. Behavior Management Program

For those students who need additional experience with employing principles of behavior management this program can offer relevant practicum experience. This special public school class which is located in the Debbie Institute, serves approximately 10 children between the ages of 6 to 8 years who have been rejected from a regular class because of inappropriate behavior. The goal of this program is to help the child develop control over his behavior and then return him to his regular class with follow-up intervention in the child's regular classroom.

This program frequently has enrolled children who could be labeled as emotionally disturbed. Trainees wishing to gain additional practical experience with this type of child can be assigned for a part of their practicum experience to this unit.

4. Mailman Center Diagnostic and Evaluation Clinics

It is often important to have had adequate exposure to interdisciplinary diagnostic and evaluation procedures. The Mailman Center currently operates six diagnostic and evaluation clinics which provide comprehensive interdisciplinary evaluations on young children. All of these clinics are designed to offer training and will include our program trainees who wish to gain experience working within such a clinic setting.

Practicum Supervision

The Debbie Institute programs have been organized to offer supervision and expertise which cuts across all programs. The activities of the intervention programs are organized into five components: classroom, parental involvement, ancillary services, evaluation, and research. Each of these components has a coordinator who is responsible for directing the activities of that unit, for coordination between components and for supervision of inter-unit training activities. Thus a student who is placed within a Debbie Institute program has the advantage of access to direct interventionists (e.g. teachers, parent trainers) but also component coordinators as resources for content and strategy information. An additional advantage of this supervisory structure is that greater consistency is possible between the varying intervention projects. For example, a practicum trainee will find that the child program format is identical regardless of the classroom to which he is assigned.

Sub-Component 1.2 - Specialist in Education Degree Program

The rapid increase in the number of classroom units to serve the severely handicapped child will bring with it a concomitant need for program supervisors and training resource people. Graduates of this Specialist in Education program will be able to fill such roles. The Ed.S. preparation program trains personnel who are not only fully competent to provide direct intervention services, but are also able to provide supervisory resource support to a direct intervention staff. One of the primary tenets of the training program is to instill the idea in teachers that the wide range and severity of handicaps they will encounter make it imperative that they seek all available resource assistance. The Ed.S. graduate, as a program supervisor, can provide the ongoing resource and feedback support that teachers of the severely impaired child will require. Many public school systems around the country have or will have positions for personnel with these competencies. In some systems these positions are called curriculum supervisors or liaison teachers, but the primary functions of these personnel, regardless of title, are to provide resource support and continuous staff training.

This sub-component also provides an academic mechanism to encourage teachers who have attained the Master's degree to pursue further education which is relevant to the field of the severely/profoundly handicapped. Many states are faced with the problems of providing adequately trained personnel to mount educational programs for the severely handicapped while

suffering personnel cutbacks in other disability areas. Few states have yet specified certification requirement which permit a teacher to work toward specialized certification in the area of the more severely handicapped. Thus a great incentive for teachers to gain retraining is lost; that is they are not working toward a degree or toward some specific certification. This can result in a large number of untrained personnel assigned to programs for the severely/profoundly handicapped. Providing a comprehensive program which also results in a more advanced degree might encourage inservice teachers to pursue retraining.

This Ed.S. level degree also provides an academic mechanism for ancillary therapy personnel, who in most cases have completed a master's degree in their particular area of expertise. This program enables such specialist to obtain both content background in special education and in the specialized problem of the severely/profoundly handicapped. Such educational input appears to be essential if specialist are to be successful in implementing comprehensive intervention programs for such significantly handicapped children.

As the role description for the Ed.S. graduate indicates, these trainees should be able to fulfill all the role duties assigned previously to the M.Ed. teacher in this program. This notion is based on a traditional but apparently valid concept that supervisors need to be able to perform a particular task well themselves if they are to teach the task effectively to others. Thus the tasks for which the Ed.S. student are trained include the five areas listed for the M.Ed. trainee: direct intervention with children, direct intervention with parents, coordination of multiple

resource inputs, curricula development, and evaluation. Each of these areas has been discussed in the previous section. In addition, two crucial tasks are necessary: training and administrative supervision. These tasks and the associated competencies are outlined below.

Training

The problems of a population of profoundly handicapped children, the lack of general information, and validated teaching materials available for use with these children requires that considerable attention be paid to the process of ongoing staff training. Because the number of personnel preparation programs for training teachers to work with the profoundly handicapped child is limited, many teachers assigned to classrooms for this population are teachers who will require retraining. This situation mandates the provision of supervisory personnel who have the background experience and motivation to provide the necessary monitoring and skill building in a population of inexperienced teachers. The competencies which would allow a person to provide appropriate training activities would include skill at assessing current functioning level of a classroom staff, practice at implementing intervention programs directed toward changing staff behavior, and methods for establishing ongoing data collection procedures to monitor progress towards attainment of objectives.

Administrative Supervision

In addition to having adequate training support, teaching personnel in programs for the profoundly handicapped require administrative support and coordination of the many necessary services. Public school teachers now must have methods for ordering disposable diapers, access to special transportation systems, and food services that can cope with restrictive

diets to mention but a few special problems. The complexity of the direct intervention task requires that the teacher be able to turn to a supervisor to develop and coordinate systems to cope with the many problems posed by this population. Additionally, the Ed.S. graduate will be faced with writing reports to various agencies, preparing project descriptions and most importantly assisting in the process of applying for various funds to continue or expand aspects of the program.

As with the other task areas the competencies required to fulfill them derive directly from the task itself. For example, an Ed.S. level supervisor who is participating in preparing a grant application should be familiar with possible funding sources, components of the grant proposal, and the necessary steps of administrative processing.

The learning activities designed to prepare the Ed.S. trainee to fulfill the tasks and competencies described above fall into two broad areas: a) didactic coursework which covers general coursework and a professional core program specializing in the severely handicapped child and b) practicum experience which includes a structured sequence of activities designed to build supervisory and training skills.

The Ed.S. course of studies at the University of Miami is a highly individualized program which is based on 60 hours of appropriate post-bachelors credit. Candidates are encouraged to choose courses from a variety of fields. Basic minimum didactic coursework must be demonstrated either through coursework at the University of Miami or from previous institutions. These minimums are outlined below:

DIDACTIC CURRICULUM FOR THE SPECIALIST IN EDUCATION DEGREE

Graduate Core

EDP 601	Essentials of Educational Research	3 credits
EDP 609	Psychological Bases of Education	2 credits
EDP 611	School in American Society	2 credits

Trainees must also participate in the coursework offered by the faculty associated with this training program which provides specialized background in the severely handicapped. These are as follows:

Specialized Core

EDP 538	Teaching the Severely Handicapped	3 credits
EDP 640	Seminar in Severely/Profoundly Handicapped	6 credits
EDP 642	Field Experience in Special Education	6 credits
EDP 693	Individual Study in Special Education	2-6 credits

Ed.S. candidates must constitute a program of studies meeting these requirements and submit them to a committee composed of faculty from this training program, area coordinator of special education, and one additional school of education faculty member.

PRACTICUM MODULES FOR THE SPECIALIST IN EDUCATION DEGREE

The practicum sequence and content contained in the M.Ed. degree component is the same for the Ed.S. trainees, although the emphasis within the modules may be somewhat different. In addition, learning activities which target administrative supervision and training are contained in the practicum modules for Ed.S. trainee. Outlines of those modules specifically targeted for the development of training and supervisory role for the Ed.S. candidate are presented below.

Module Title: STANDARDS AND PROGRAM MAINTENANCE

I. Behavioral goal for trainee:

To demonstrate the ability to identify and maintain realistic appropriate service support systems.

II. Level of participation, Time-line, Sequence position:

Ed.S. participation mandatory; Trainees participate as a team. Semester II, 2 weeks.

III. Target Behaviors:

Trainee will: a) be exposed to typical service support systems in operation, food service, transportation, administration
b) become familiar with typical standards and licensing requirements

IV. Assessment device and method:

This is an exposure module. No form of evaluation other than self report of value is planned.

V. Training content and sequence:

Trainee will: a) receive orientation to food service program, the guidelines, and operation
b) duplicate activities of a) with the transportation system.
c) review Family Service standards, Division of Retardation standards, and PCS's standards
d) evaluate Debbie School program against those standards.

VI. Trainer:

Practicum Coordinator and Educational Coordinator

Module Title: STANDARDIZED ASSESSMENT

I. Behavioral goal for trainee:

To demonstrate the ability to assess a child using a standardized instrument and interpret the results in a manner relevant to an intervention program.

II. Level of participation, Time-line, Sequence position:

Semester I, two weeks.

III. Target Behaviors:

Trainee will: a) demonstrate a knowledge of the theoretical justification for standardized assessments (Seminar)
b) gain some introductory skill at administering several standardized assessments
c) gain some practice at adapting a standardized instrument to low-functioning, multiply handicapped populations

IV. Assessment device and method:

Criterion referenced evaluation of assessment given
(Criterion sheet to be developed)

V. Training content and sequence:

Trainee will: a) receive lectures and films on standardized assessment rationale and problems
b) choose several standardized tests which can be administered to children
c) administer each test to a normally functioning child and a low functioning children
d) have another trainee assess children to get inter-rater reliability or test-retest the same children

VI. Trainer:

Practicum Coordinator with Seminar
(perhaps schedule group for MCCD assessment clinic observation)

VII. Seminar
MCCD Training Clinic coordinator

Module Title: THE ART OF GRANTSMANSHIP

I. Behavioral goal for trainee:

To practice generating a funding base for a service/research program of educational intervention.

II. Level of participation, Time-line, Sequence position:

Ed.S. (team approach), Semester II, final module, 2 week duration

III. Target Behaviors:

Trainee will demonstrate:
a) knowledge of funding agencies on local, state, regional, federal levels
b) knowledge of types of solicitation (RFP, field initiated)
c) knowledge of components of proposal
d) knowledge of administrative processing of proposal

IV. Assessment device and method:

Criterion referenced evaluation of final product
(criteria sheet to be constructed)

V. Training content and sequence:
a) request trainee investigate a funding agency's structure (each student covers different one, some at each level)
b) as a team(s) students respond to a mock RFP which targets all relevant components of a proposal
c) proposal is run through mock council which requests justification (human rights, finance, admin. etc.)
d) trainees will review each other's proposal (as well as trainer review)

VI. Trainer:

Practicum Coordinator with assistance of program faculty for review

VII. Coordination:

Should real RFP be available at time of module trainees might be exposed to this sequence in a realistically functional way

Component 2.0 Inservice Training (Non-Degree Component)

This particular component addresses a critical need for the provision of inservice training to teaching personnel of public and private agencies providing educational services to the severely/profoundly handicapped.

Sub-Component 2.1 - Joint Inservice Training with LEA and SEA

One of our primary inservice targets is public school personnel. Florida, like many other states, is facing the problem of finding appropriately trained personnel are not available and political pressure from teacher unions to hire teachers with seniority regardless of their background or experience. Therefore many teachers assigned to these newly emerging classes for the severely handicapped will be poorly prepared to deal effectively with the multiple problems presented by the target population. This reality makes it particularly appropriate that this personnel preparation program target this population of teachers for inservice training. Three critical areas for inservice training have been pinpointed:

a) methods and/or strategies for functional evaluations

b) methods and/or strategies for positioning, moving and developing increased motor skills

c) methods and/or strategies for adaptive feeding techniques

In order to assist the SEA/LEA in providing this critically needed inservice training, two state-wide workshops will be held to provide information to local district teachers throughout the state who are assigned to units for the severely/profoundly handicapped child. The content focus of these workshops will be:

Workshop #1 Functional Assessment and Evaluation - This workshop will stress initial and on-going assessment and evaluation strategies which are directly relevant to the effective educational programming of the severely handicapped child.

Workshop #2 Adaptive Feeding and Positioning - This workshop will provide basic information on adaptive positioning, movement and motor programming for the motorically impaired child. Also targeted will be adaptive feeding techniques and special food texture programs.

Sub-Component 2.2 - Inservice Training for Local Non-Public School Agencies

The second major inservice training target is personnel of community programs who are serving the severely/profoundly handicapped child birth through three years of age. Florida law permits the provision of public education services for the handicapped child under five years but does not mandate such service. Local educational agencies are providing limited services for handicapped children ages three through five years but almost

no services for those children below age three; consequently, in Florida, for the next few years the provision of educational services for the handicapped child under age three will fall to other state and local agencies. As with public school personnel, the personnel of these programs need additional information and expertise to improve the quality of programming being offered to these young handicapped children. Ongoing inservice training for teachers working in local programs for handicapped children under age three is provided.

Sub-Component 2.3 - Inservice Training for Personnel for Out-of-State Programs

The substantial number of demonstration programs located at the Mailman Center, Debbie Institute attracts many visitors each year. For example, approximately 1,000 people viewed the programs during the past year. Many of individuals requesting to see the programs actually want training--that is, they want to know how to establish and operate a parent training unit or how to write IEPs or how to set up a classroom monitoring system. Initially we attempted to meet the needs of these visitors through brief discussions with the direct intervention staff; however, this strategy has proven to be unworkable for two reasons. First, the direct intervention staff does not have sufficient time to provide the requested and needed input and secondly the visitor often needs indepth information about specific aspects of intervention. For these reasons we have established such visits as legitimate training targets

and have established a formal procedure for providing such training. A typical schedule for the short-term training visits is presented below.

Typical Schedule for Short-Term Training Visit

Day I	
Arrival and Overview of Programs	Orientation of visitor to educational programming for the young severely/ profoundly handicapped child.
Directed Observation	View Debbie Institute programs with emphasis on characteristics of the population and indication of activities as they reflect program areas and techniques of instruction.
Evaluation and Programming	Overview of method of programming for child, includes assessment, establishment of objectives, intervention plans, collection of performance data and evaluation.
Curriculum Implementation and Modification	Introduction to developmental approach to curriculum, methods for planning activities to attain developmental goals and techniques for adapting materials to be more useful with the severe/profound population.
Day II	
Parent Involvement	Background on effect of planning for parent participation in programming. Overview of Debbie Institute parent involvement program. Suggestions for establishing a program to meet different needs.

Ancillary Services	Overview by Physical Therapist, Nurse Practitioner, and Nutritionist on the importance of ancillary service input for comprehensive programming for the severely/ profoundly handicapped.
Individualized Needs	Some time is scheduled in each training visit to provide input on the specific interest/needs of individual trainees. The program staff at all levels is available for this resource input (e.g. research activities, training activities, direct classroom participation, administration, etc.)

Sub-Component 2.4 - Special Practicum/Inservice Training for Pre-Service Students

The proposed training offered under this component can be divided into three areas: undergraduates in Special Education, UAF graduate trainees, and paraprofessionals.

Undergraduates in Special Education from local universities are placed in Debbie Institute programs and receive special training in dealing with the severely impaired young child. During the past two years procedures for training these students have been developed and are used to assure quality input to each trainee.

The primary goal of a UAF is the training of a variety of students from various disciplines. Students involved in other UAF training endeavors receive specialized training in the area of the young severely handicapped child. Such training must be individualized depending upon the type of student, their background, and the goals of this specific training program.

The final target in this sub-component is training students that are enrolled in specific training programs for paraprofessionals. This training program provides specialized training for aide-level personnel who plan to work in programs for the severely impaired young child. This training is carried out largely in the calssroom of the Debbie Institute and is primarily experientially based.

Each of the inservice training and learning activities has been selected because it most reasonably and efficiently provides didactic and/or practicum training to the target group of trainees. The exact content of each activity will vary slightly depending on more careful evaluation of each participant's strength and needs.

Component 3.0 (Products Component)

The third component of this training program is focused on the development of two products: specialized information (didactic coursework) and practicum training modules.

Sub-Component 3.1 - Creation of Specialized Coursework

During the past two years three specialized didactic courses have been created: 1) Developmental Processes and the Severely Handicapped Child, 2) Issues and Problems in the Education of the Severely/Profoundly Handicapped, and 3) Instructional Procedures for the Severely Handicapped. Outlines for these courses are included in Component 1.0 (Degree Component). Three additional courses are being developed. These courses are titled: Early Intervention with the Young Handicapped Child, Methods and Strategies for Parental Involvement and Education, and The Educational Synthesizer. An outline for each of these proposed courses is presented below.

Early Intervention with the Young Handicapped Child

This course will provide a survey of the field of early intervention. A history of the development of early intervention programs will be provided along with exploration of significant new approaches. Curricular domains, personnel, and evaluation strategies specifically appropriate for the developmental young handicapped child will be discussed.

I. Significance and/or rationale for Early Intervention

A. Overview of the Course

B. Rationale for Early Intervention

1. Maximize development progress
2. Inhibit the development of undesirable responses
3. Attentuate the development of associated disabilities
4. Support for families

II. Historical Perspective of Early Intervention

A. Description of Early Intervention Programs

B. Early Intervention Research

III. Early Experience

A. Comparative Research on Animals

B. Effects on the Human Organism

C. Implication of the Research Findings

IV. Current Approaches to Early Intervention

A. Early Childhood Education Programs

1. Philosophy
2. Structure

B. Special Education Programs for Young Children

1. Philosophy
2. Structure

V. Instructional Content and Procedures

A. Curricular Domains for Intervention

1. Communication
2. Sensorimotor
3. Motor
4. Social/self-help

B. Instructional Strategies

1. Antecedent arrangement of the environment
2. Shaping the response
3. Consequation tactics

VI. Personnel

A. Skills and Competencies

VII. Evaluation Strategies

A. Assessing Baseline Performance

B. Daily/Weekly Monitoring Strategies

C. Quarterly Assessments

D. Standarized Assessments

Methods and Strategies for Parental Involvement and Education

I. Significance of Assisting the Family of the Handicapped Child and the Effect of the Handicapped Child on the Family

A. Research on the significance of the mother-child interaction

B. Literature on the effect of the handicapped child on the family unit

1. Psychological effect - marriage, siblings, family structure
2. Special needs of the family in terms of assistance
3. Parents search for assistance and professional attitudes-professional/parent interactions

C. Benefits of assisting the family

1. Child
2. Parent and family unit
3. Educator
4. Society - in terms of the cost of institutionalization

II. Generalized Approaches to Assisting the Family

A. Parent as educator

1. Rationale for helping parents gain educational intervention skills
2. Approaches to instruction
   a. home-based, center-based, media, public schools
   b. group instruction, individual instruction
   c. content of instruction, i.e. behavior modification and materials used
3. Research on effect of educated parents who follow-through in the home on child's educational progress
   a. Headstart
   b. Model Programs
4. Child advocacy
   a. parent and child's rights - due process, Buckley Amendment, 94-142
   b. affect parents have had on legislation - ARC groups
   c. Citizen Advocacy Program

B. Social Service Assistance

1. Rationale for assisting families in the area of social service
2. Type of assistance that is most needed - studies in this area
3. Professionals in this field - social workers, protective services, etc.
4. Where to go for information - compiling a social service assistance file - SSI, food stamps, etc.

C. Counseling the Family of the Handicapped

1. Review of the literature in this area
2. Types of counseling - individual, group, sibling, family
3. How to locate professionals in this field who can assist the family of the handicapped child
4. Communication skills
5. Dealing with parent's perception of retardation
6. Dealing with death of the child

III. Working with a Culturally-Varied Population

A. Effect of cultural differences on educational intervention

B. Attitudes and values of different ethnic groups as it affects special education

IV. Special Education Programs with Parental Involvement

A. First Chance Network public school programs, Headstart, pre-school programs. Discussion of various programs with program descriptions and materials.

B. Major considerations in setting up a parental involvement program--emphasis on the Debbie Institute program

1. Goals
   a. specific objectives for parents
   b. long-term programmatic goals

2. Structure
   a. type of intervention
   b. procedures and materials

3. Personnel
   a. who serves function of parent interventionist
   b. qualities of interventionist that are important

4. Record-keeping system

5. Evaluation
   a. Individual parent progress
   b. Parent involvement program

C. Different levels of involvement

1. Maximum support system (Debbie Institute)

2. Minimum support system (public school)

3. No-support system (single classroom)

V. Parent Training as a Profession

A. Educational programs which offer certification in parent training or include parent training as course work

B. Values, ethics, professionalism

The Educational Synthesizer

This course will provide the student with background content and practical techniques for becoming an educational synthesizer. An educational synthesizer is one who can take information and applied techniques provided by a specialist and integrate them into the daily classroom program for the child.

I. The Educational Synthesizer
   - A. An Overview of the Course
   - B. Definition and Explanation of the Educational Synthesizer
   - C. Rationale for the Consultative Rather than Therapy Model

II. Physical Therapy
   - A. Methods of Positioning
   - B. Methods of Moving Children
   - C. Methods for Relaxation
   - D. Methods for Developing New Motor Skills

III. Health Care and Problems
   - A. Procedures for Assessing Health Care of the Child
   - B. Strategies for Seeking Necessary Support Assistance
   - C. Emergency Procedures
   - D. Monitoring Systems

IV. Communication Problems
   - A. Assessment of Child's Problems
   - B. Relationship of Physical Problems to Potential for Communication
   - C. Alternative Modes of Communication
   - D. Strategies for Monitoring Progress

V. Feeding Techniques
   - A. Assessment of the Child's Problem

B. Techniques for Adaptive Feeding

C. Techniques for Developing Self-Feeding

Sub-Component 3.2 - Practicum Training Modules

The training modules described in Component 1.0 are under development for the practicum portion of this program. The matrix contained in Sub-Component 1.1 indicates the training modules to be developed. Although the exact format, content and training activities which comprise each module are somewhat specific to the competencies being targeted, a consistent format outline is employed in the creation of the modules and includes:

1. Goal of the Module	A general statement of the intended outcome of the proposed activity.
2. Prerequisite/Co-requisite Information and Experience	A specification of required content or skill background necessary to complete the proposed activity.
3. Objectives and Sub-Objectives	Behavioral statements of outcomes of the activities, specification of content and skills to be acquired.
4. Time Sequences	Specification of the sequence of activities and coordination of training activities.
5. Glossary of Terms	Definition of relevant terminology necessary to successfully engage in the module's activities or to meet objectives.
6. Training Activities	Specification of the actual learning activities, including availability of resources and strategies to monitor progress.
7. Evaluation Procedure	Indication of how the trainee is to demonstrate acquisition of the objectives and how to evaluate the attainment.

8. Recycling Procedure	Specification of remedial steps for non-criterion performance at any given point in the movement through the training activities.
9. Reading and Resources	Bibliographic information on required and elective reading materials which are relevant to the module topic.

Although dissemination of the coursework and training modules is not a major goal of this project, all materials developed will be available upon request to any interested party.

Evaluation

Evaluation Strategies for Component 1.0 - Pre-service Degree Program

Three major evaluation objectives have been established for this training component. These objectives are:

1) To assess change in the trainees information/knowledge base across important content areas (e.g. didactic coursework);
2) To determine the effectiveness of the practicum training activities (e.g. practicum modules); and
3) To determine the general characteristics of the trainees (e.g. demographic information).

Although this component is composed of sub-component 1.1 for M.Ed. trainees and sub-component 1.2 for Ed.S. trainees, the evaluation strategies are the same for each sub-component. The evaluation of the pre-service degree training program is divided into didactic coursework, practicum activities, and demographic information.

Didactic Coursework:

The purpose for evaluating the acquisition of didactic coursework is to assure that the trainee reaches the established criteria for the informational/knowledge base. Without such a knowledge base we believe the future teacher/supervisor will not be maximally effective in organizing, structuring or delivering educational services to the severely handicapped child and his family.

The pre-service trainees are involved in three types of coursework; a specialized core, general education courses, and electives. Attainment of informational competencies acquired in the general education and elective coursework will not be specifically monitored other than the

standards set by the university for graduate study. Monitoring the acquisition of information from the special core courses will be done in more detail. This monitoring system is described below as a series of evaluation strategies each with a statement of the frequency of administration and an outline of the summary product.

Didactic Evaluation Strategy One - Pre-post Assessment of Overall Program Content

A pre-test composed of items representing the major content areas addressed in the specialized coursework has been developed. The format of this pre-test is short answer and multiple choice in order to objectively score the trainee's responses. This pre-test is to be administered to the pre-service trainees during the first week of the program. The post-test, which is a replication of the pre-test, will be given at the termination of the trainees program of studies. An index of change in informational competencies will be derived from the numerical differences between scores on the pre- and post-test. Thus it will be possible to determine if the criterion level for information attainment has been reached as well as an indication of the informational competencies acquired during the course of studies by the trainee.

Didactic Evaluation Strategy Two - Specific Coursework Examinations

Each of the four specialized core courses will employ a more detailed pre-post test design in order to sample, in depth, the acquisition of content targeted by that course. The pre-test will be administered at the beginning of the semester in which the specialized course is offered and the post-test will be the final examination. Numerical changes in pre-post-test performances will be computed to determine if the criterion level of information acquisition, and the amount of change in information

levels over the duration of the course has been reached. The primary use of such evaluation information will be to provide remediation routes, if necessary, for any student who fails to attain the specified criterion for each of the special courses.

Didactic Evaluation Strategy Three - Comprehensive Examinations

Comprehensive examinations will be taken by all pre-service trainees. The examinations are composed of three parts: 1) a series of papers directed toward specific topics critical to the education of the severely handicapped child, 2) qualifying orals, and 3) a written exam which will include both an objective and semi-subjective format. The written comprehensive exam is taken during the final month of training. The area papers will be spaced over the entire year of study. The oral qualifying exam will take place two to three weeks prior to the written exams and will provide the student with feedback for areas that need further preparation prior to taking the written comprehensive examination. Parts of the written exam will yield a numerical score to be compared to the pre-test score (Evaluation Strategy One) to ascertain changes in informational competencies. The oral exam and essay portion of the written exam will provide an indication of a student's ability to deal with critical issues in a professional manner.

Practicum Training Activities:

The purpose of the evaluation efforts in this area will be to determine the type and amount of change in instructional and programming skills demonstrated by the program's trainees. Since this program is constituted primarily as practicum based with a heavy emphasis on actual experiences working with the target population, evaluation efforts in this area are of

critical importance. Three types of evaluation strategies are employed:

1. Needs assessment by the trainee
2. Needs assessment by the practicum supervisor
3. Performance skill measures

Practicum Evaluation Strategy One - Needs Assessment Questionnaire

Because this program selects towards trainees who have had experience working with severely handicapped individuals, it is important to recognize and respond to the professional student's ability to have detected many of his/her own educational deficits. Consequently, a needs assessment questionnaire has been developed to assist students in communicating to the program staff what they consider to be their most significant training needs.

This instrument is administered at the beginning of each semester of the student's program. The results of this testing can be compared from semester to semester to determine:

a) which areas the student feels are most critical to his training, and

b) which areas the student has felt he has received adequate input.

Practicum Evaluation Strategy Two - Supervisor's Ratings of Student's Needs

This evaluation strategy involves the completion of the needs assessment instrument by the practicum supervisor. The practicum supervisor completes the need assessment questionnaire once a semester on each trainee. By comparing the ratings of the trainee with the ratings of the practicum supervisor on the questionnaire, valuable information can be gained. Areas where there is a discrepancy between what the student and the supervisor perceive as a training need should be targeted for a closer examination by the training faculty as a potential problem area in need of further programming.

Practicum Evaluation Strategy Three - Performance Skill Measures

The purpose of this evaluation activity is to determine the acquisition of targeted skills or competencies by the student engaged in practicum activities. Two such performance measures are planned for each trainee. The first measure involves video taping of students in a structured situation with a severely handicapped child. The trainee is asked to elicit or train a specific behavioral target. Students are rated on the appropriateness of the strategies selected to attain the objective with the child. Such activities as pre-planning of materials to be used, methods of stimuli presentation, acquisition of adequate background knowledge on the child (e.g., developmental level, reinforcing stimuli, previously successful training modes), appropriateness of consequation tactics selected and shaping procedures used will be examined. The taping is done at the beginning and at the conclusion of the classroom intervention module, and the student's performances compared.

A second performance measure is being developed which will involve the demonstration of parental interaction skills. The same video tape format as described above will be used, and will be administered at the beginning and end of the parental involvement module. Using a mechanism developed by Filler (in press) the trainee's behavior in these two video sessions will be rated. Changes in scores from pre- to post-measures will provide an indication of the effectiveness of the practicum training in specific areas.

Practicum Evaluation Strategy Four - Continous Feedback on Direct Intervention Skills

The purpose of this evaluation strategy is to provide the trainee

with regular and timely feedback on his training skills with his practicum target (children, parents, other professionals or para-professionals). One form that is used is the Training Proficiency Checklist, developed by R. Don Horner at the University of Kansas to monitor the trained performance during the classroom practicum module.

Demographic Information:

A third type of information that will be gathered for the evaluation of Component 1.0 is demographic data on each trainee. The purpose of collecting such information will be to describe the trainee population. The rationale for gathering such information is for better utilization of recruitment resources (e.g. to have some idea of potential pools of applicants for recruitment) and to modify the program to accommodate typical strengths or weaknesses of the trainee population.

Evaluation Strategy One - Demographic Survey

A demographic summary questionnaire has been developed which will be used to determine the characteristics of the trainee population. This survey will be completed soon after the trainee begins his program of studies. Information gathered in this survey will be collapsed into group data and evaluated to determine if certain group characteristics exist. Such information will be used to adjust the training program to make it more appropriate for the trainee population which it serves. For example, three years of information from students enrolling in the Special

Project's Personnel Preparation Program have indicated that while the trainees as a group have had adequate exposure to the older severely/profoundly handicapped children, they have had little coursework or experience with the young severely handicapped child. As a result an additional course on early intervention is being developed and proposed for inclusion into the training program.

Evaluation Strategies for Component 2.0 - Inservice Training

The major training focus of this component is to provide additional information to teachers of the severely impaired child working in the field with the intention that acquiring such specialized information will lead to more effective programming for the target population. Thus a major evaluation target for this component will be to determine changes in informational competencies of the inservice trainees. A secondary evaluation focus will be to determine, in so far as possible, the number of severely/profoundly handicapped children which have been effected by such training efforts. Although highly desirable, establishing functional relationships between inservice training and child progress is not currently possible given current fiscal constraints.

Inservice Evaluation Strategy One - Information Assessment

This evaluation strategy will involve sampling specific entry and exit levels of information of the workshop participants. Although this is not a sophisticated evaluation mechanism, it appears to be a reasonable strategy to employ with large numbers of trainees. A pre-post test will be given at the beginning and conclusion of each workshop to determine if significant shifts in information accrual have occurred.

Inservice Evaluation Strategy Two - Participant Satisfaction Questionnaire

A survey questionnaire asking participants to rate the content, presentation and relevance of the workshop information will be administered following each workshop session. Responses to the questions will be analyzed to determine the level of satisfaction with the workshop content and presentation.

Evaluation Strategies for Component 3.0 - Products

Specialized Coursework

As detailed in previous sections of this paper, four core courses dealing with content specifically relevant to the education of the severely handicapped child have been developed for this training program. The evaluation of this coursework will center on the acquisition of the targeted content by students and determining the appropriateness of this content for future job performance.

The acquisition of content by trainees will be determined by administering a pre-post test for each course. Changes in scores on these tests will provide a measure of the acquisition of course content. In addition, a follow-up questionnaire (which is described in the next section) to be administered one year after graduation, contains questions which ask the graduate to evaluate the relevance of the program content to their current job domains. Consistency in discrepancies between course content and job requirements will mandate modifications in the content of these courses.

Practicum Activities

All practicum activities are scheduled and implemented in the form of modules. Each module has specific objectives for acquisition of content and/or performance skills. The types of evaluation efforts of practicum activities have three foci: acquisition of criterion performance skill, suitability of presentation and relevance, and applicability of content information.

The determination of the effectiveness of the practicum activity module on the acquisition of the targeted competency is made by comparing pre-post test scores. Suitability of the presentation format of the activities is determined by a satisfaction questionnaire administered as part of the exit activities from the module. Module participants are asked to evaluate the effectiveness, and applicability of content, sequence of activities, and interest level of presentation. Comments and suggestions for improvement of the modules are solicited. A section of the one-year follow-up questionnaire asks the program graduates to comment on the relevance of the practicum activities to their current job roles and responsibilities. Such feedback will be used to modify the target objectives of some practicum activities and the activities planned to meet those objectives.

Evaluation of Overall Program Effectiveness

In the preceding sections the evaluation mechanisms and expected summary products for each sub-component have been presented. The more global effectiveness of this personnel preparation program will also be assessed. The overall goal of any such training program should be to

provide additional well-trained teachers and to upgrade the competencies of the educational interventionists who are currently working in direct service delivery systems. In order to enhance the quality of educational services, two goals must be met: a) providing adequate numbers of trained personnel to fill available positions, and b) assuring quality performance by these personnel in direct service positions. How we propose to meet these goals to evaluate our efforts is described below.

Evaluation Strategy One for Overall Program - Follow-up Questionnaire

The purpose of the questionnaire will be to gather information from the program graduate on his current placement and degree of involvement with the severely/profoundly handicapped population. As discussed in a previous section this questionnaire will also provide feedback on the relevance of program content and practicum experience. Students will be asked to complete the questionnaire one year following graduation and then annually as funding permits. Information gained from the follow-up questionnaire will be analyzed along a number of dimensions such as job placements, source of fiscal support, roles and responsibilities, number of children in various categories being affected, etc. Such information may prove useful in program modification and planning future personnel preparation training endeavors.

Evaluation Strategy Two for Overall Program - Supervisor's Rating

The purpose of this evaluation activity will be to provide some indication of the graduate's on-the-job performance as judged by his/her supervisor. The supervisor will be asked to complete a form that requests a variety of information in terms of the previous student's

effectiveness with the target population. The information will be sought one year following graduation and thereafter if deemed appropriate. The information from the supervisors will provide a subjective but important evaluation of the trainees perceived effectiveness on the job.

Evaluation Strategy Three for Overall Program - Third Party Evaluator

We are proposing to have an evaluation of the training program done each year by a third party evaluator. A respected and knowledgeable teacher trainer will be invited to visit and observe the program, talk with the staff, meet with students and then write a report. The third party evaluator will be asked to focus on two areas: 1) an evaluation of the current program and 2) offering constructive alternatives for noted problems or deficiencies.

ACHIEVEMENTS

In the fall of 1974 the University of Miami's Department of Pediatrics (Mailman Center for Child Development) and the Department of Educational Psychology submitted a Special Project's application entitled, Training Personnel to Provide Educational Programs for the Severely/Profoundly Handicapped Child, to the Division of Personnel Preparation, Bureau for the Education of the Handicapped. This application was approved and the training program initiated on June 1, 1975. This Special Projects has been directed toward the accomplishment of four goals:

a) to offer a program of studies leading to a master's degree in special education for those students interested in providing direct intervention services to severely/profoundly handicapped children; b) to offer a specialist in education degree for post-master students who desire special supervisory training and experience with severely/profoundly handicapped children; c) to offer individually tailored short-term training experience for special educators who are working in academic settings or in state and local departments of education in the area of the severely/profoundly handicapped child; and d) to offer carefully supervised practicum experience for undergraduate students in special education. (1976, Special Project's Continuation Application)

During the past two years the staff has published the following chapters that are directly relevant to personnel preparation:

Bricker, D.D., Bricker, W.A., Iacino, R., & Dennison, L. Intervention strategies for profoundly retarded children. In N. Haring & L. Brown (Eds.), Teaching the severely handicapped: A yearly publication of the American Association for the Education of the Severely/Profoundly Handicapped. New York: Grune & Stratton, 1976.

Bricker, D.D. Educational synthesizer. In Hey, don't forget about me! Education's investment in the severely/profoundly, and multiply handicapped. Council for Exceptional Children, Reston, VA, 1976.

Bricker, D.D., & Iacino, R. Early intervention with severely/profoundly handicapped children. In E. Sontag, J. Smith & N. Certo (Eds.), Educational programming for the severely/profoundly handicapped. Reston, VA: Division on Mental Retardation of the Council for Exceptional Children, 1976.

Haring, H., & Bricker, D.D. Overview of comprehensive services for the severely/profoundly handicapped. In N. Haring & L. Brown (Eds.), Teaching the severely handicapped: A yearly publication of the American Association for the Education of the Severely/Profoundly Handicapped. New York: Grune & Stratton, 1976.

Iacino, R., & Bricker, D. The generative teacher. In N. Haring & D. Bricker (Eds.), Teaching the severely handicapped, Vol. III, in press.

In summary, this Special Project's grant:

a) will have graduated 35 preservice students by July, 1978

b) has already provided inservice training to over 400 trainees with the expectation of serving a substantial number of additional inservice trainees during the third year of this grant, and

c) has produced specialized coursework, a number of training modules and professional literature describing a model of personnel preparation.

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